#### **D04B**

#### **KNITTING**

#### **Definition statement**

This subclass/group covers: weft knitting machines are covered by D04B 7/00 to D04B 13/00,

details of, or auxiliary devices incorporated in such machines are covered by <u>D04B 15/00</u> and

articles made by such machines are covered by D04B 1/00

warp knitting machines are covered by <u>D04B 23/00</u> to <u>D04B 25/00</u>, details of, or auxiliary devices incorporated in such machines are covered by <u>D04B 27/00</u> and articles made by such machines are covered by <u>D04B 21/00</u>

details of, or auxiliary devices incorporated in knitting machines not limited to a specific kind of knitting machine are covered by <a href="D04B-35/00">D04B-35/00</a>

miscellaneous knitting machines and articles made by such machines are covered by <u>D04B 39/00</u>

hand knitting equipment is covered by <u>D04B 3/00</u>, <u>D04B 5/00</u> and <u>D04B 33/00</u>

auxiliary apparatuses or devices for use with knitting machines are covered by <u>D04B 37/00</u> or for hand knitting equipment are covered by <u>D04B 17/00</u>, <u>D04B 19/00</u> and <u>D04B 31/00</u>

## Relationship between large subject matter areas

The difference between the subclass D04B and B32B5 is as follows:layered products including knitted products as such should be classified in B32B5 only; layered products formed by a knitting process featuring specified patterns or information on the composition of the knit article should be classified in D04B. Note that such products may comprise additional coated faces.

#### References relevant to classification in this subclass

This subclass/group does not cover:

Layered products (i.e. laminates)	B32B 5/00
including knitted articles	
	1

Knitted products of unspecified	<u>A41A</u> 61F
structure or composition, e.g. wearing	
apparel, e.g. filters implantable into	
blood vessels, prostheses etc.	

## Special rules of classification within this subclass

The distinction between warp and weft knitting processes is essential for correct classification in this group. Fabrics, machines and processes not belonging to one of these two main knitting processes are considered miscellaneous (i.e. <u>D04B 39/00</u>).

## **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

In this subclass, the following terms are used with the meaning indicated:

a knitted fabric is a fabric comprising one or more inter-looped yarns

a woven fabric is a fabric comprising straight warp yarns interlinked by interlaced weft yarns

#### D04B 1/00

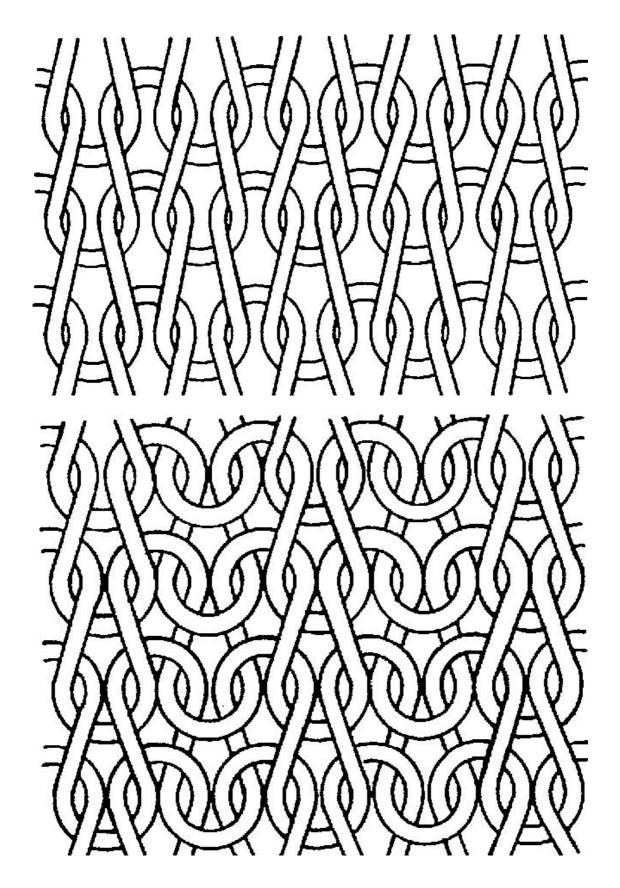
Weft knitting processes for the production of fabrics or articles not dependent on the use of particular machines; Fabrics or articles defined by such processes

#### **Definition statement**

This subclass/group covers:

weft knitting processes or fabrics with specific details on materials and/or fabric structure

weft knitted fabrics and weft knitting processes not otherwise provided for, e.g. plain jersey or rib knitting processes and fabrics:



# References relevant to classification in this group

This subclass/group does not cover:

Warp knitting processes and products D04B 21/00

04B 39/04
00

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Weft knitting processes for the production of patterned fabrics (e.g. wrap striping)	D04B 1/10
Unravelling knitted fabrics	<u>D04B 19/00</u>

## Special rules of classification within this group

In this group, multiple classification is allowed. The classification is desirably complemented by a classification in the indexing scheme relating to textiles (i.e. <u>D10B 2101/00</u> to <u>D10B 2509/08</u>) for identifying the thread composition, fabric structure and application field.

## Synonyms and Keywords

In patent documents the following expressions/words "standard weft knit fabrics", "mesh fabric", "jersey" and "rib knit" are often used as synonyms.

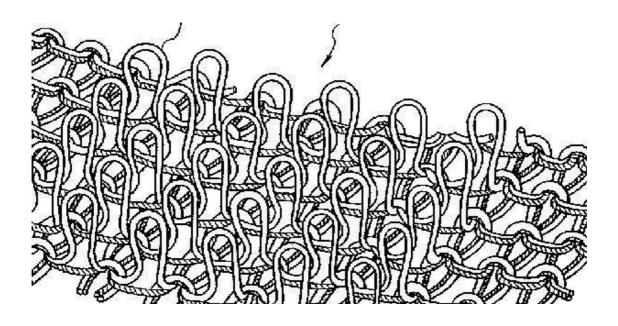
#### D04B 1/02

## Pile fabrics or articles having similar surface features

#### **Definition statement**

This subclass/group covers:

Fabrics or articles comprising a weft knit ground fabric with knitted in fibres or yarns projecting from one or both fabric faces. Example:



### References relevant to classification in this group

This subclass/group does not cover:

pile fabrics without pile forming material, e.g. fleece, and loft obtained by finishing treatments like napping <u>D10B 2403/0111</u>, <u>D10B 2403/0121</u> in combination with the appropriate <u>D04B</u> (sub)group

pile fabrics subjected to napping treatment D06C 11/00

piles applied to a preformed ground fabric (e.g. by tufting) D05C

pile fabrics forming part of socks or stockings D04B 1/26

pile fabrics included in upper parts of panties or pants D04B 1/243

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Woven pile fabrics	D03D 27/00

# Special rules of classification within this group

The classification is desirably complemented by a classification in the Indexing Code <a href="D10B 2403/01">D10B 2403/01</a> identifying surface features.

Documents also describing machines for weft knitting pile fabrics should additionally be classified in D04B 7/12, D04B 9/12 or D04B 11/08.

# **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

are fabrics having a significant portion of fibres or yarns, different from ground fabric fibres or yarns, projecting from and oriented transverse to one or both ground fabric faces.

## **Synonyms and Keywords**

In patent documents the following expressions/words "terry", "plush", "velour", "cut pile" and "velvet" are often used as synonyms.

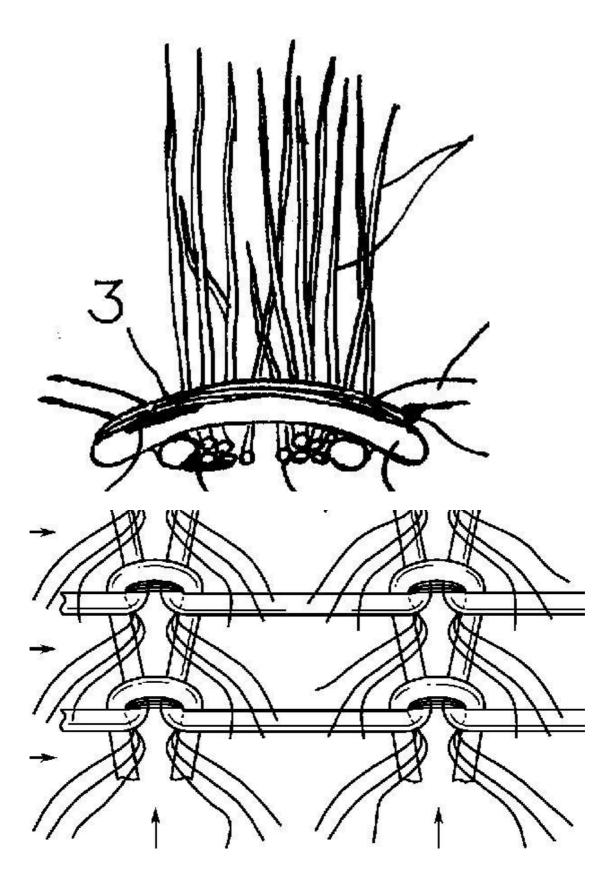
## D04B 1/025

# [N: incorporating loose fibres, e.g. high-pile fabrics or artificial fur]

#### **Definition statement**

This subclass/group covers:

Fabrics or articles having loose fibres incorporated during the weft knitting process. Examples:



**Informative references** 

Attention is drawn to the following places, which may be of interest for search:

Flocked products, i.e. products wherein the projecting fibres are not routed in a stitch thread	B05C 19/001.

Documents describing fur garments or garments of fur substitute should be complemented with the Indexing Code <u>D10B 2501/044</u>.

Documents also describing circular knitting machines forming high-pile fabrics should additionally be classified in <a href="D04B 9/14">D04B 9/14</a>.

#### D04B 1/04

## characterised by thread material

#### **Definition statement**

This subclass/group covers:

pile fabrics or articles whereby the properties of the pile thread material alone, or in combination with the pile arrangement, ensure special effects, e.g. enhanced cushioning or thermal shielding.

## Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> - <u>D10B 2331/301</u> for identifying the thread composition.

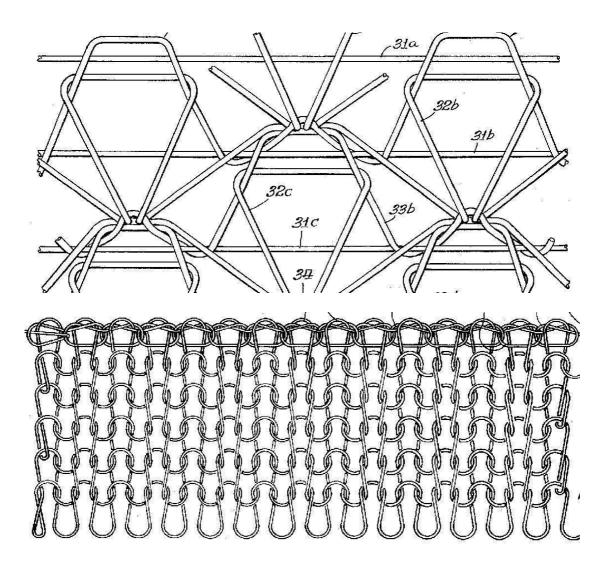
#### D04B 1/06

#### Non-run fabrics or articles

#### **Definition statement**

This subclass/group covers:

Fabrics or articles rendered ravel resistant and/or ladderproof by knitting texture or composition. Example:



Documents covering non-run stockings should be classified in <u>D04B 1/26</u> and <u>D04B 1/06</u>.

Documents also describing machines for weft knitting non-run fabrics should additionally be classified in <u>D04B 9/48</u> or <u>D04B 11/30</u>.

## D04B 1/08

## characterised by thread material

#### **Definition statement**

This subclass/group covers:

non-run fabrics or articles whereby the properties of a thread material alone, or in combination with the stitch pattern, ensure ravel resistance and render the fabric or article ladderproof.

The classification in this group is desirably complemented by a classification in the indexing scheme  $\underline{\text{D10B 2101/00}}$  -  $\underline{\text{D10B 2331/301}}$  for identifying the thread composition.

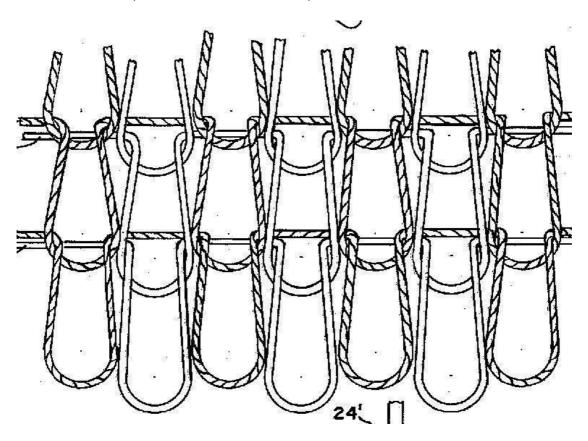
## D04B 1/10

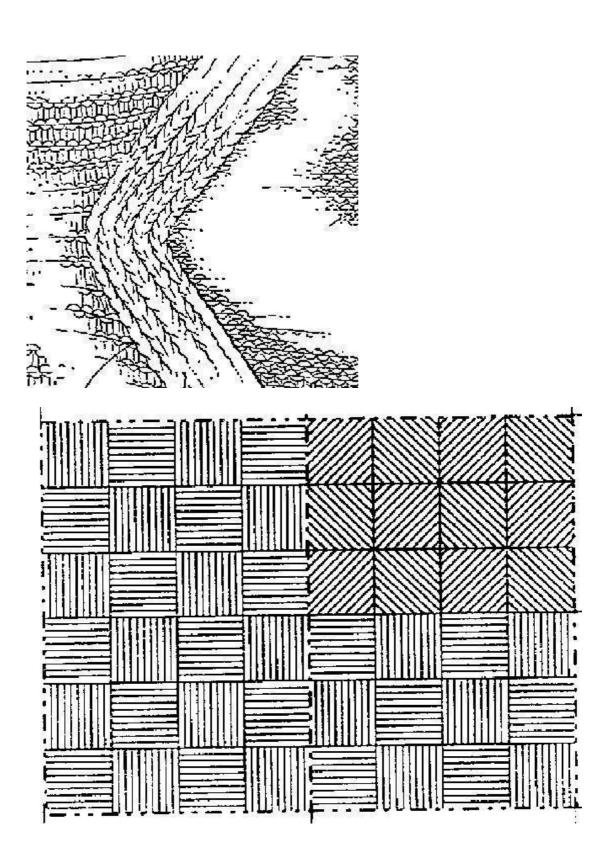
#### Patterned fabrics or articles

#### **Definition statement**

This subclass/group covers:

Fabrics or articles wherein the non-uniform arrangement of stitches and/or different threads, alone or in combination, ensures the intended effects.





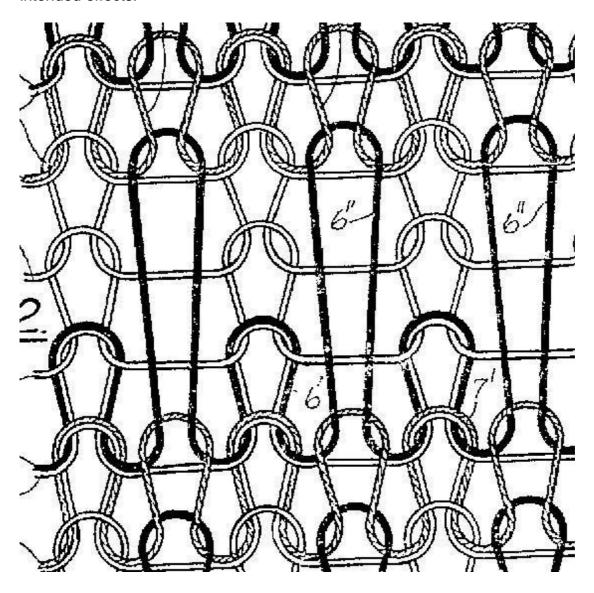
Documents also describing machines for weft knitting patterned fabrics should additionally be classified in <a href="D04B 7/24">D04B 7/24</a>, <a href="D04B 11/18">D04B 11/18</a>.

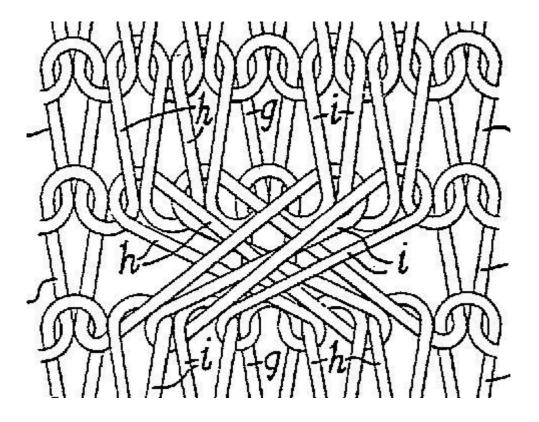
# [N: with stitch pattern (D04B1/06, D04B1/08 take precedence)]

## **Definition statement**

This subclass/group covers:

Patterned fabrics or articles wherein primarily the knitted texture ensures the intended effects.





Documents also describing machines for weft knitting stitch patterns should additionally be classified in <u>D04B 7/20</u>, <u>D04B 7/28</u>, <u>D04B 9/06</u>, <u>D04B 9/10</u>, <u>D04B 9/38</u>, <u>D04B 11/14</u>, or <u>D04B 11/22</u>.

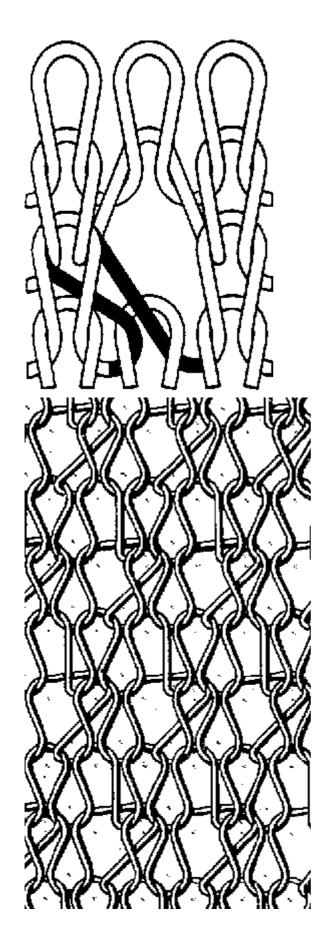
## D04B 1/104

[N: Openwork fabric, e.g. pelerine fabrics]

## **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group.



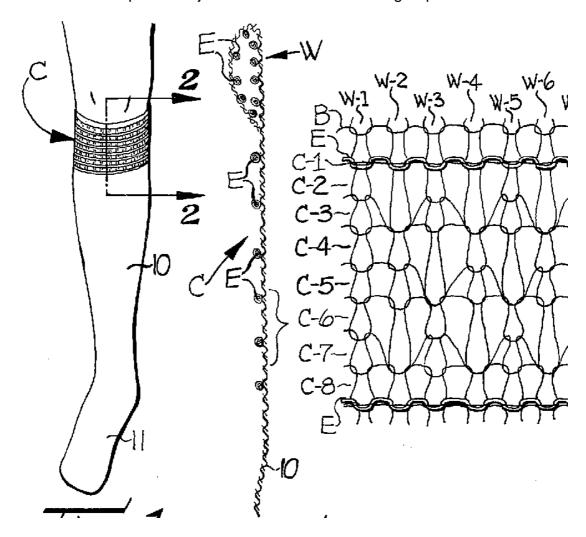
D04B 1/106

## [N: at a selvedge, e.g. hems or turned welts]

#### **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group.



#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Binding off methods and stitch	D04B 1/22.
structures	

# Special rules of classification within this group

Documents also describing machines for weft knitting hems or welts should additionally be classified in <u>D04B 7/22</u>, <u>D04B 9/24</u>, <u>D04B 9/54</u>, <u>D04B 11/16</u> or <u>D04B 11/32</u>.

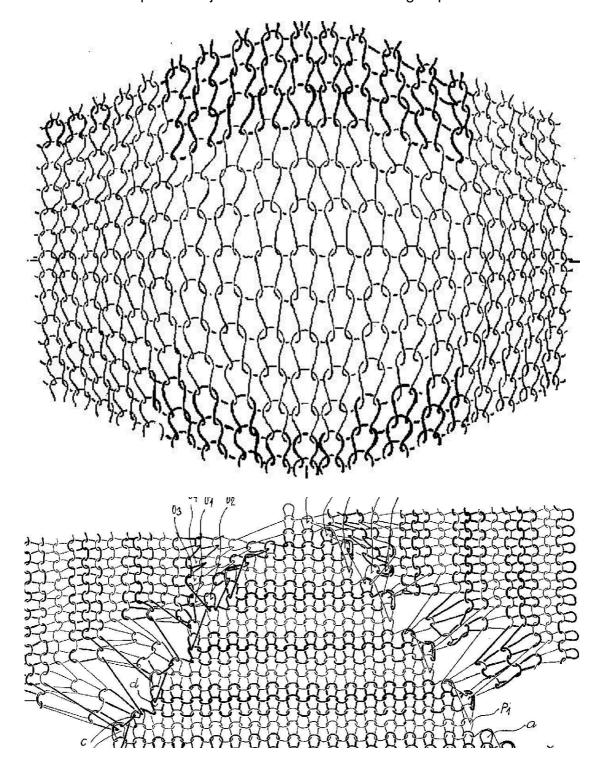
## D04B 1/108

# [N: Gussets, e.g. pouches or heel or toe portions]

## **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group:



The classification is desirably complemented by a classification in the Indexing Code <a href="D10B 2403/033">D10B 2403/033</a> identifying a three dimensional fabric.

Documents also describing machines for weft knitting gussets or pouches should additionally be classified in <u>D04B 7/30</u>, <u>D04B 9/42</u>, <u>D04B 9/56</u>, <u>D04B 11/26</u> or <u>D04B 11/34</u>.

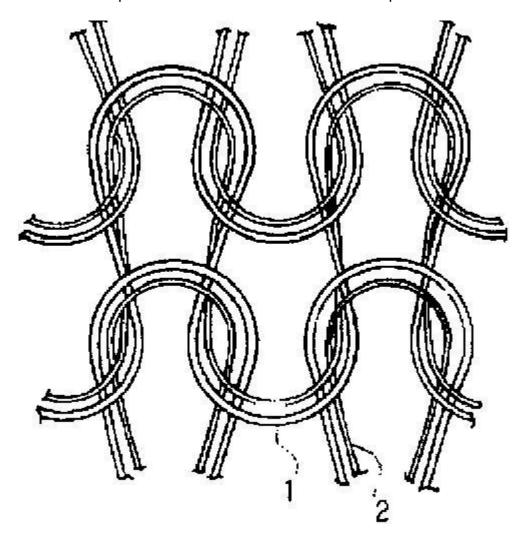
#### D04B 1/12

## characterised by thread material

#### **Definition statement**

This subclass/group covers:

Fabrics or articles whereby the properties of a thread material in combination with the stitch pattern ensure intended effects. Example:



Special rules of classification within this group

The classification is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> - <u>D10B 2331/301</u> for identifying the thread composition and/or <u>D10B 2403/0114</u> for identifying plated fabrics.

Documents also describing circular knitting machines producing either spliced fabrics or plated fabrics should additionally be classified respectively in <a href="D04B">D04B</a> 9/18 or <a href="D04B">D04B</a> 9/34.

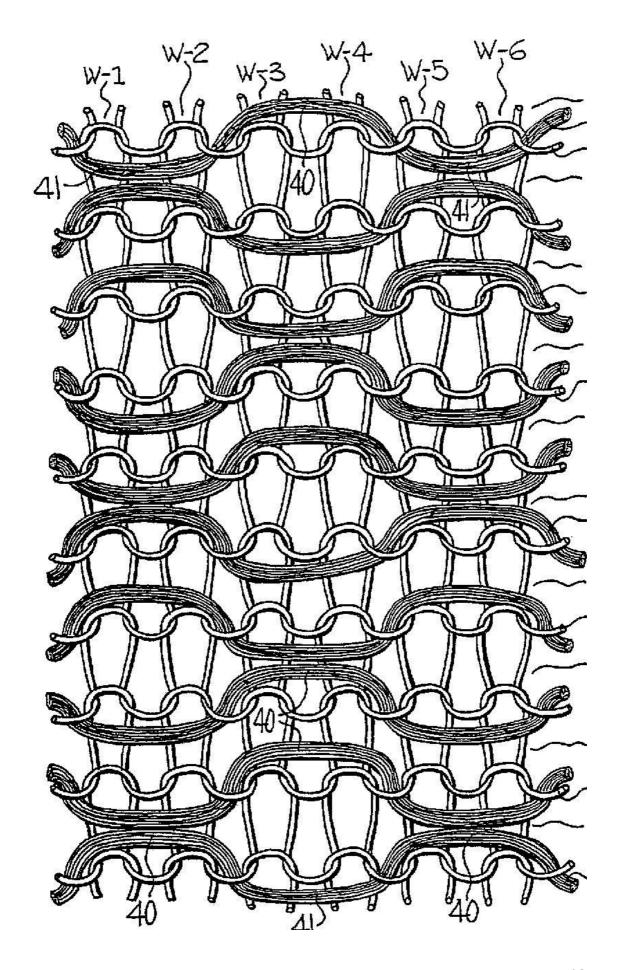
#### D04B 1/123

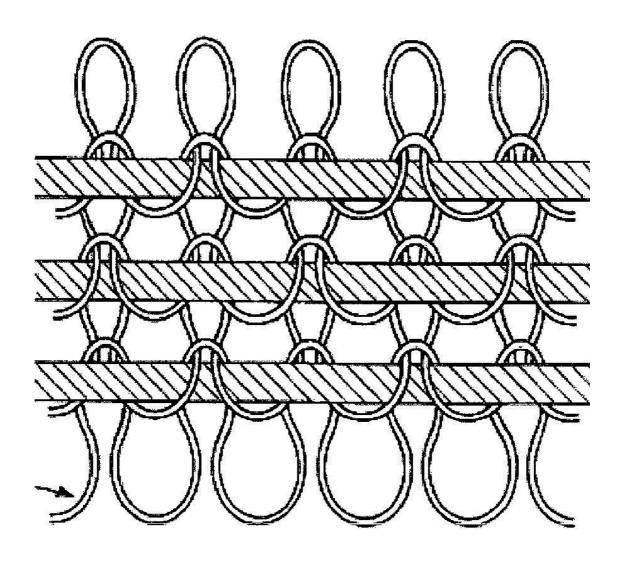
[N: with laid-in unlooped yarn, e.g. fleece fabrics (with elastic weft yarn D04B1/18)]

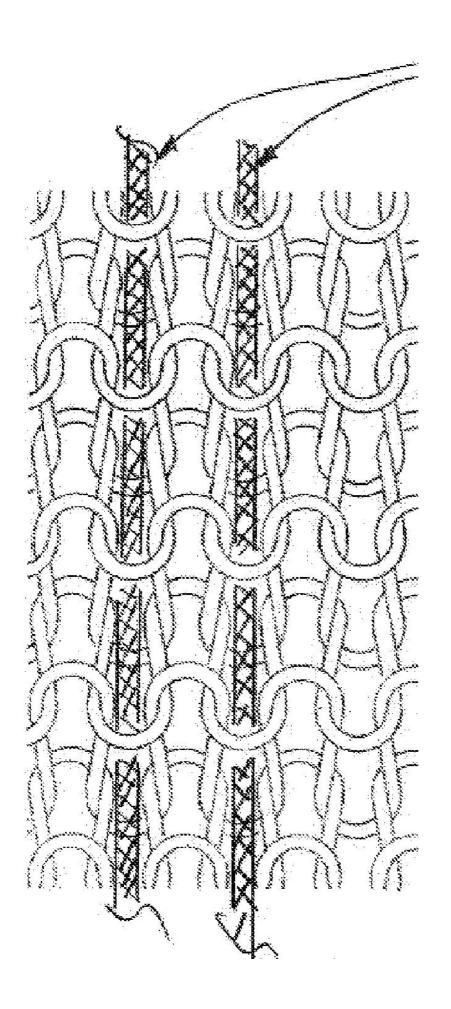
#### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter covered by this group.







The classification is desirably complemented with the Indexing Code <a href="D10B">D10B</a> <a href="2401/063">2401/063</a> identifying high strength fabric and/or <a href="D10B">D10B</a> <a href="2403/02411">2403/02411</a> identifying fabric with enhanced mechanical properties with arrays of unbent yarn.

Documents also describing machines for weft knitting yarn inlay fabrics should additionally be classified in D04B 7/14, D04B 9/16 or D04B 11/10.

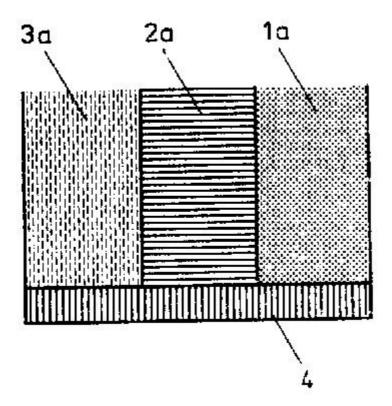
#### D04B 1/126

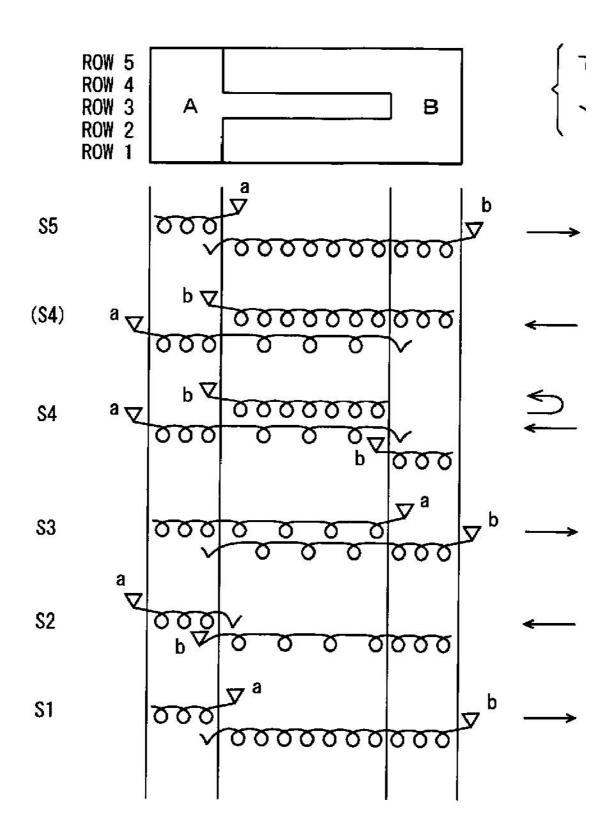
[N: with colour pattern, e.g. intarsia fabrics]

#### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.





Documents also describing machines for weft knitting colour patterns should additionally be classified in D04B 7/26, D04B 9/28 or D04B 11/20.

Documents also describing a thread changing device should additionally be classified in <u>D04B 15/56</u> or <u>D04B 15/58</u>.

### **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

is a knitting technique used to create patterns with multiple colours. There is only one active colour on any given stitch.

#### D04B 1/14

# Other fabrics or articles characterised primarily by the use of particular thread materials

#### **Definition statement**

This subclass/group covers:

fabrics comprising threads providing special properties, e.g. metal yarns, not provided for in groups  $\underline{004B\ 1/16}$  to  $\underline{004B\ 1/20}$ .

## Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> for identifying the thread composition.

Documents also describing circular knitting machines for weft knitting reinforcing threads should additionally be classified in <u>D04B 9/18</u>.

#### D04B 1/16

## synthetic threads

#### **Definition statement**

This subclass/group covers:

fabrics or articles wherein the properties of a thread material in combination with the thread arrangement ensure the intended effects, e.g. cover, hand or resilience.

## Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2201/20</u>, <u>D10B 2211/20</u>, <u>D10B 2321/00</u> or <u>D10B 2331/00</u> for identifying the thread composition.

### **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

In this group, the following term (or expression) are used with the meaning indicated:

are yarns made from or predominantly comprising artificial organic fibres or filaments.

#### D04B 1/18

#### elastic threads

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Fabrics or articles with stitch pattern at a selvedge	D04B 1/106
Weft knitting processes specially adapted for upper parts of panties, pants	D04B 1/243
Weft knitting processes specially adapted for surgical stockings	D04B 1/265

# Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> - <u>D10B 2331/301</u> for identifying the thread composition.

Documents also describing machines for producing fabrics incorporating elastic threads should additionally be classified in <u>D04B 7/16</u> or <u>D04B 11/12</u>.

Documents also describing a thread feeding device should additionally be classified in D04B 15/48.

## **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

In this group, the following term (or expression) are used with the meaning indicated:

are threads which fully recover to the initial length from extension by 100 per cent or more.

## D04B 1/20

## crimped threads

## **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

·	are threads having elasticity imparted primarily by the fibre or filament configuration, e.g. by curls or twists.
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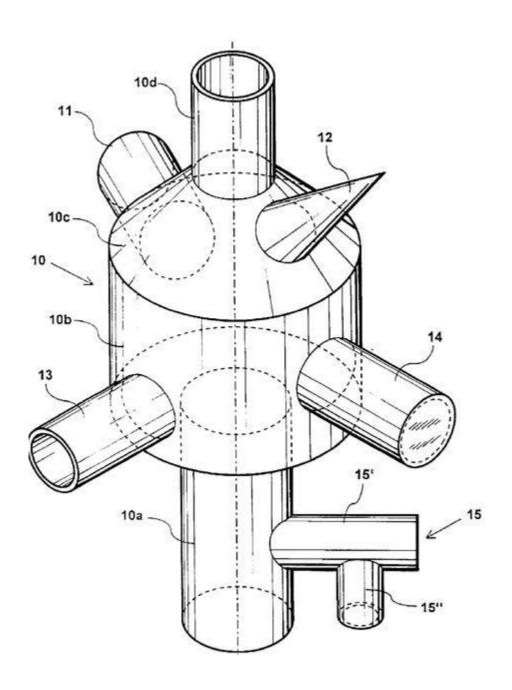
## D04B 1/22

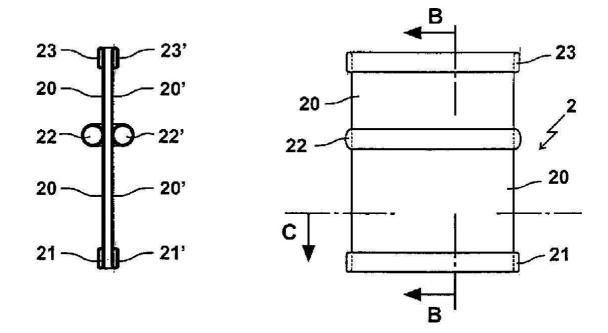
# specially adapted for knitting goods of particular configuration

#### **Definition statement**

This subclass/group covers:

Articles requiring adaptation of the standard knitting process and/or the standard knitting machine setup. Examples:





The classification is desirably complemented with the Indexing Code <u>D10B</u> <u>2403/02</u> identifying cross-sectional features and/or <u>D10B 2403/03</u> identifying shape features.

Documents also describing machines for weft knitting articles of particular configuration should additionally be classified in <u>D04B 7/30</u>, <u>D04B 9/42</u> or <u>D04B 11/26</u>.

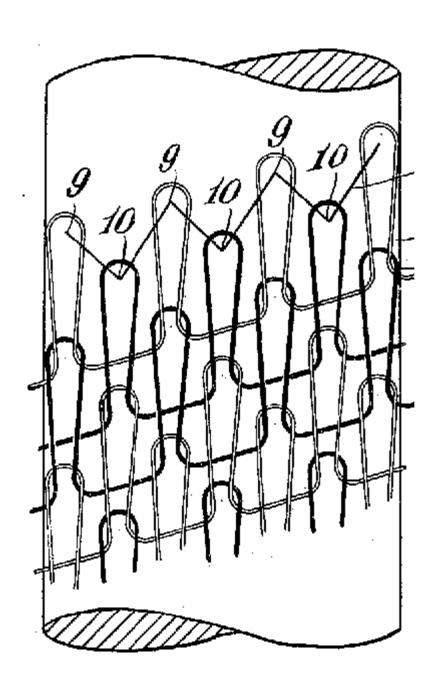
#### D04B 1/225

[N: Elongated tubular articles of small diameter, e.g. coverings or reinforcements for cables or hoses]

#### **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group.



# References relevant to classification in this group

This subclass/group does not cover:

Warp knitted elongated tubular articles of small diameter	D04B 21/205
Elongated tubular articles of small diameter made by knitting processes other than weft knitting	D04B 39/00

# **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Hoses with reinforcements embedded	<u>F16L 11/08</u> .
in the wall	

## Special rules of classification within this group

The classification is desirably complemented with the Indexing Code <a href="D10B">D10B</a>
<a href="2403/031">2403/031</a> identifying narrow fabric of constant width.

Documents also describing circular knitting machines for weft knitting elongated tubular articles of small diameter should additionally be classified in D04B 9/44.

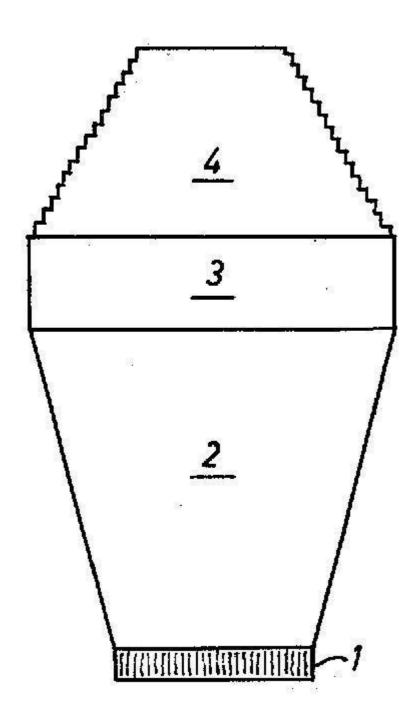
### D04B 1/24

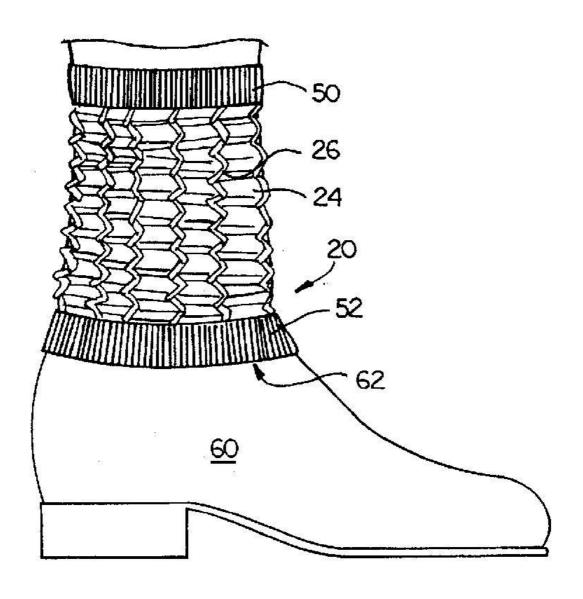
## wearing apparel

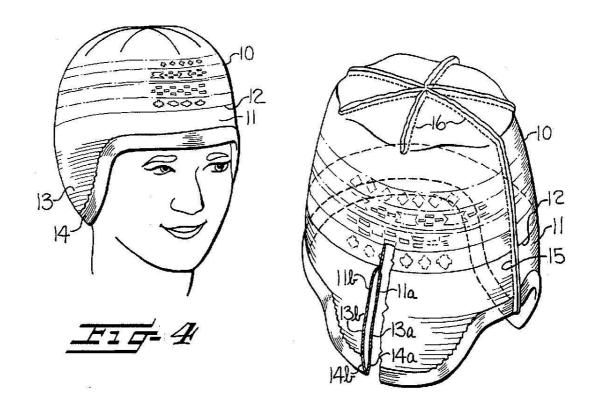
#### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.







The classification is desirably complemented with the Indexing Code <a href="D10B">D10B</a>
<a href="2501/00">2501/00</a> identifying the type of wearing apparel and/or <a href="D10B 2403/032">D10B 2403/033</a> identifying respectively flat fabric of variable width and three dimensional fabric.

Documents also describing flat knitting machines respectively for tubular goods or for fully-fashioned goods should additionally be classified respectively in <a href="D04B 7/32">D04B 7/32</a> or <a href="D04B 7/32">D04B 7/10</a>.

Documents also describing circular knitting machines for flat fabric portions should additionally be classified in <a href="D04B 9/20">D04B 9/20</a>.

Documents also describing straight bar knitting machines for wearing apparel should additionally be classified in <a href="D04B 11/36">D04B 11/36</a>.

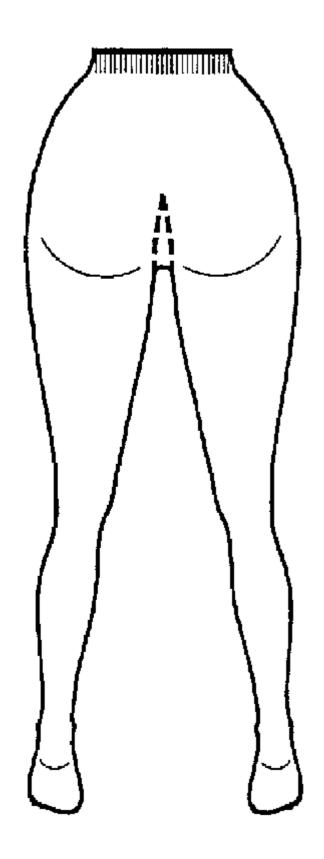
#### D04B 1/243

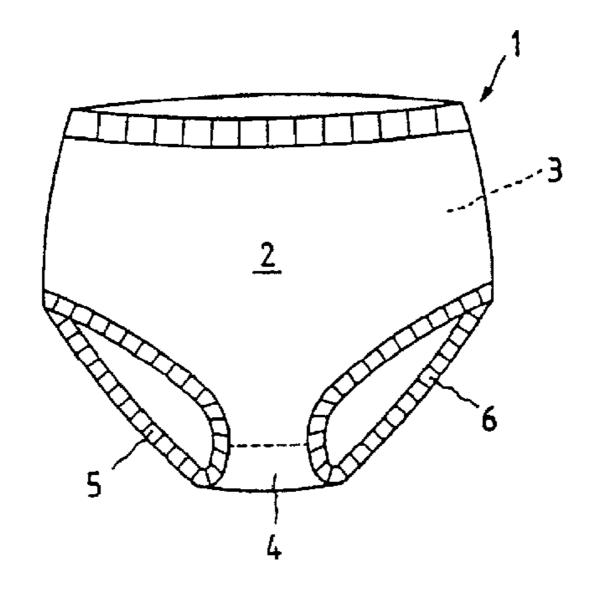
[N: upper parts of panties; pants]

#### **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group.





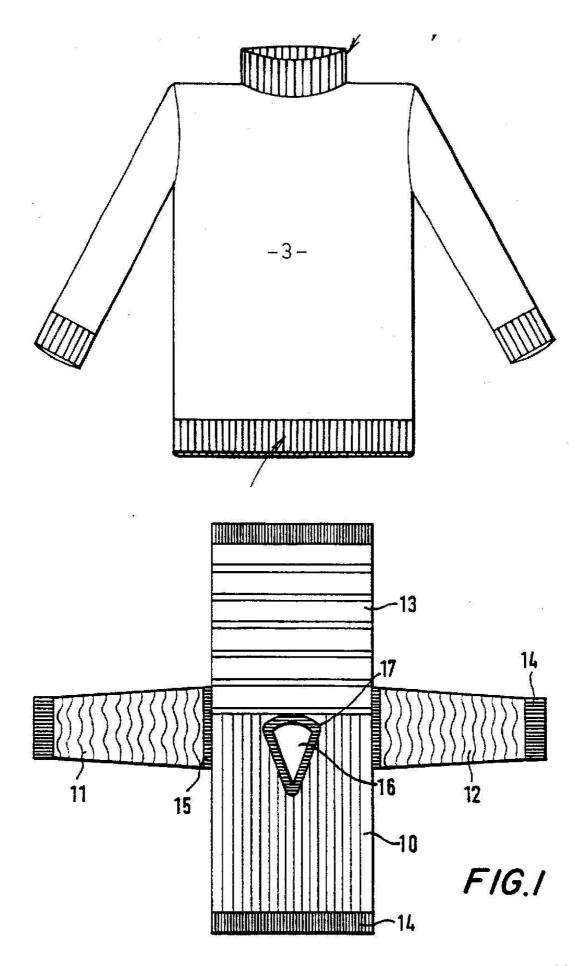
## D04B 1/246

[N: Upper torso garments, e.g. sweaters, shirts, leotards]

## **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.



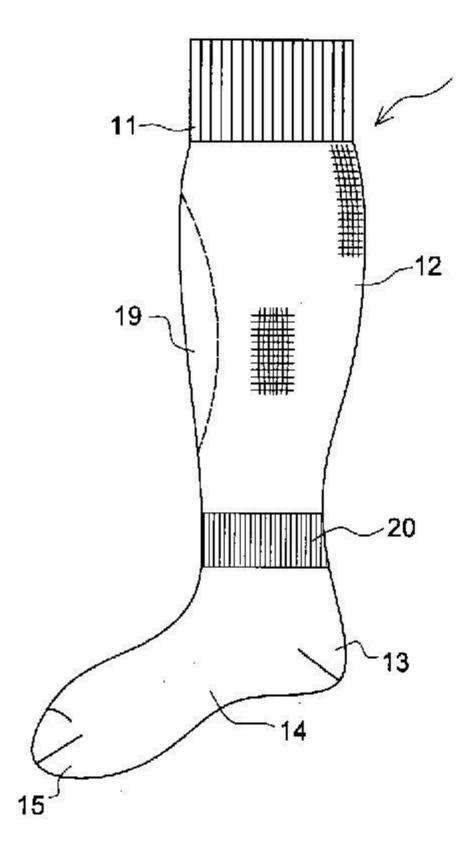
The classification is desirably complemented with the Indexing Code <u>D10B</u> <u>2403/032</u> identifying flat fabric of variable width and/or <u>D10B 2403/0333</u> identifying three dimensional fabric with tubular portions of variable diameter or distinct axial orientation.

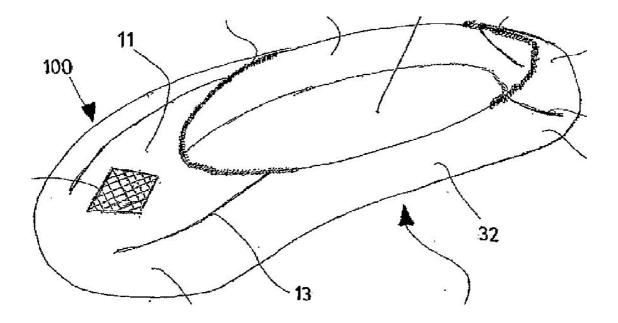
## D04B 1/26

## stockings

#### **Definition statement**

This subclass/group covers:





Documents describing heel or toe portions should additionally be classified in D04B 1/108.

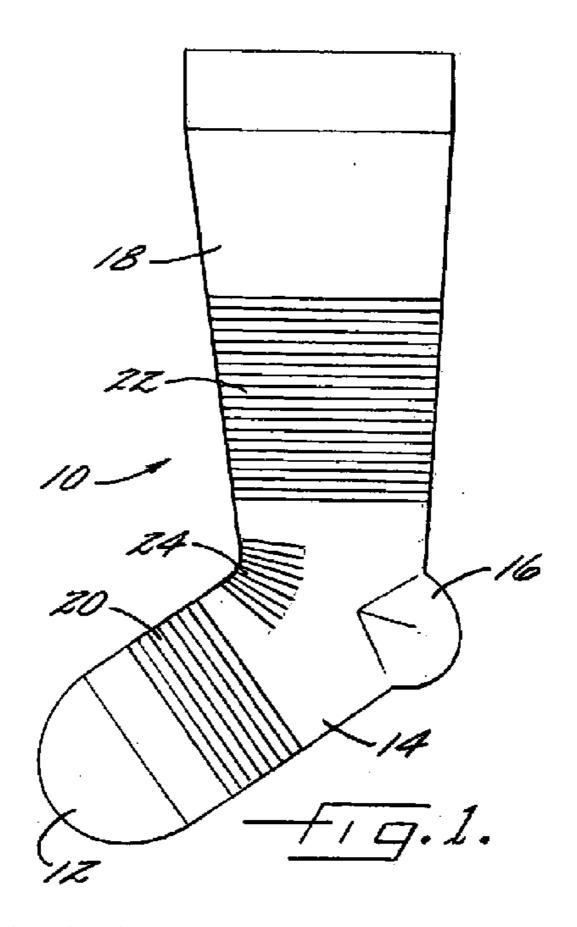
Documents also describing machines for weft knitting socks or stockings should additionally be classified in <u>D04B 7/32</u>, <u>D04B 9/46</u> or <u>D04B 11/28</u>.

## D04B 1/265

[N: Surgical stockings (of unspecified knit construction and reinforced A41B11/02; of unspecified knit construction and elastic A61F13/08)]

#### **Definition statement**

This subclass/group covers:



**Informative references** 

Attention is drawn to the following places, which may be of interest for search:

Fabrics or articles including elastic	<u>D04B 1/18</u>
threads	

## Special rules of classification within this group

Documents also describing circular knitting machines for weft knitting surgical stockings should additionally be classified in <u>D04B 9/52</u>.

Documents also describing elastic hems, e.g. mock rib should additionally be classified in  $\underline{D04B\ 1/106}$ .

## **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

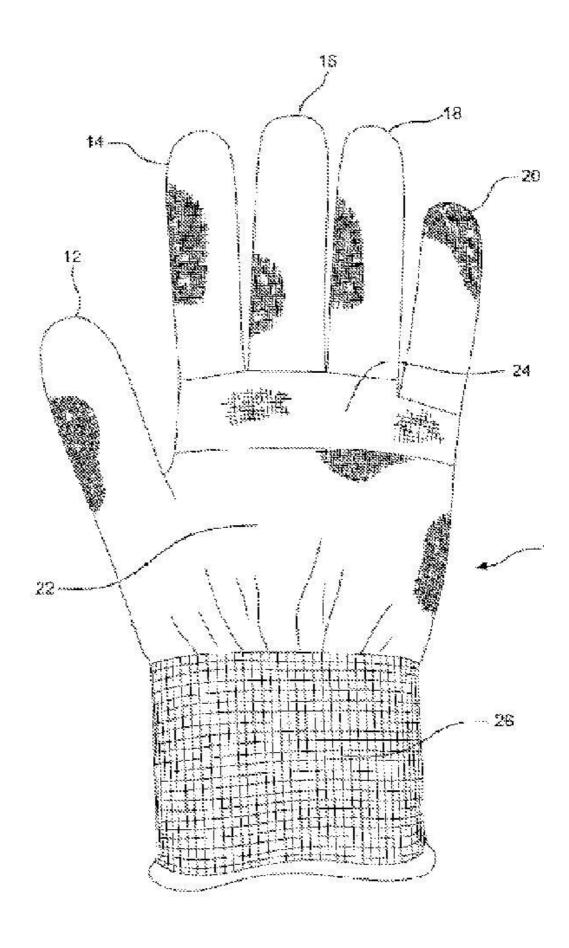
means socks or stockings with predominantly therapeutic effect, e.g. against veins disease.

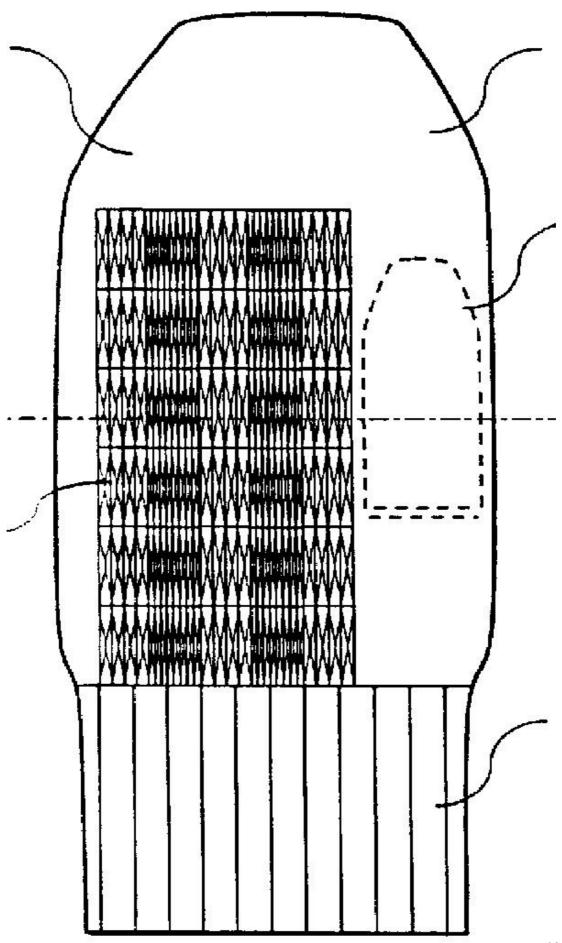
#### D04B 1/28

## gloves

#### **Definition statement**

This subclass/group covers:





Documents also describing machines for weft knitting gloves should additionally be classified in <u>D04B 7/34</u> or <u>D04B 9/58</u>.

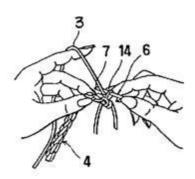
## D04B 3/00

## Hand tools or implements

#### **Definition statement**

This subclass/group covers:

Hand knitting methods using knitting needles for forming stitches, and devices for effecting such knitting methods.



## Special rules of classification within this group

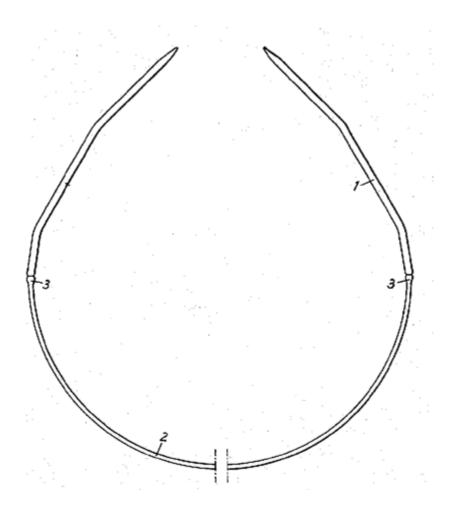
Documents describing hand driven flat knitting machines should additionally be classified in <a href="D04B 7/08">D04B 7/08</a>.

## D04B 3/02

#### **Needles**

#### **Definition statement**

This subclass/group covers:

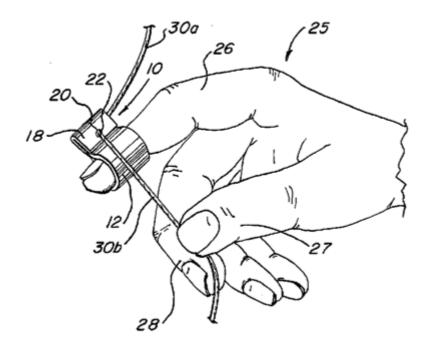


# D04B 3/04

# Finger protectors; Thread tensioners

## **Definition statement**

This subclass/group covers:

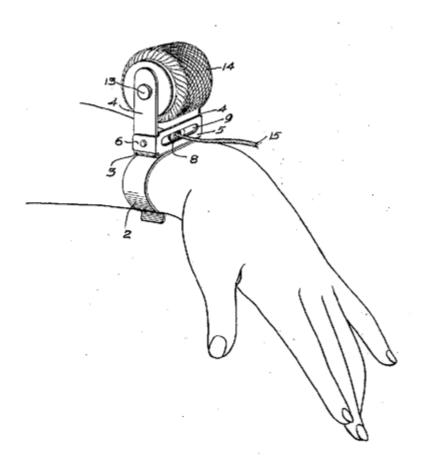


## D04B 3/06

# **Ball holders or receptacles**

## **Definition statement**

This subclass/group covers:



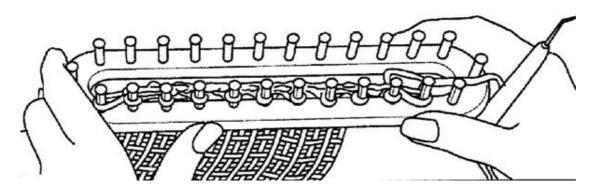
## D04B 5/00

Knitting apparatus or machines without needles for domestic use (with needles D04B7/08)

#### **Definition statement**

This subclass/group covers:

Knitting tools forming stitches without needle movements. Example:



## D04B 7/00

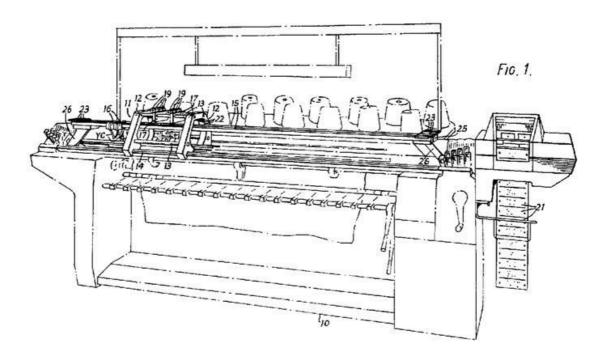
Flat-bed knitting machines with independently-movable

## needles (straight-bar machines with fixed needles D04B11/00)

#### **Definition statement**

This subclass/group covers:

Flat weft knitting machines with sequential stitch formation in a row of stitches.



#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Flat warp knitting machines	<u>D04B 23/00</u> .

#### D04B 7/025

[N: with stitch-length regulation (cam systems for stitch-length regulation D04B15/327)]

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in  $\underline{\text{D04B 1/22}}$ .

#### D04B 7/045

[N: with stitch-length regulation (cam systems for stitch-length regulation D04B15/327)]

Documents also describing knitted goods of particular configuration should additionally be classified in <a href="D04B 1/22">D04B 1/22</a>.

#### D04B 7/06

## for purl work or links-links loop formation

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern should additionally be classified in <a href="D04B 1/102">D04B 1/102</a>.

#### D04B 7/10

# with provision for narrowing or widening to produce fully-fashioned goods

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in D04B 1/22.

#### D04B 7/12

## with provision for incorporating pile threads

## Special rules of classification within this group

Documents also describing knitted pile fabrics should additionally be classified in D04B 1/02.

#### D04B 7/14

# with provision for incorporating internal threads in laid-in fabrics

## Special rules of classification within this group

Documents also describing knitted goods with laid-in unlooped yarn should additionally be classified in <u>D04B 1/123</u>.

#### D04B 7/16

for producing fabrics consisting of, or incorporating, elastic threads

Documents also describing knitted goods consisting of, or incorporating elastic threads should additionally be classified in D04B 1/18.

#### D04B 7/20

with provision for changing the fabric construction, e.g. from plain to rib-loop fabric

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern should additionally be classified in D04B 1/102.

#### D04B 7/22

with special provision for commencing goods, e.g. with non-run edges

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at a selvedge should additionally be classified in <a href="D04B 1/106">D04B 1/106</a>.

## D04B 7/24

## for producing patterned fabrics

## Special rules of classification within this group

Documents also describing non-run fabrics or articles should additionally be classified in D04B 1/06.

Documents also describing patterned fabrics characterised by thread material should additionally be classified in <a href="D04B 1/12">D04B 1/12</a>.

#### D04B 7/26

#### with colour patterns

## Special rules of classification within this group

Documents also describing knitted goods with colour pattern should additionally be classified in D04B 1/126.

#### D04B 7/28

## with stitch patterns

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern should additionally be classified in <a href="D04B 1/102">D04B 1/102</a>.

#### D04B 7/30

# specially adapted for knitting goods of particular configuration

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in <u>D04B 1/22</u>.

#### D04B 7/32

## tubular goods

## Special rules of classification within this group

Documents also describing integrally knitted wearing apparel should additionally be classified in D04B 1/24.

#### D04B 7/34

#### gloves

## Special rules of classification within this group

Documents also describing knitted gloves should additionally be classified in D04B 1/28.

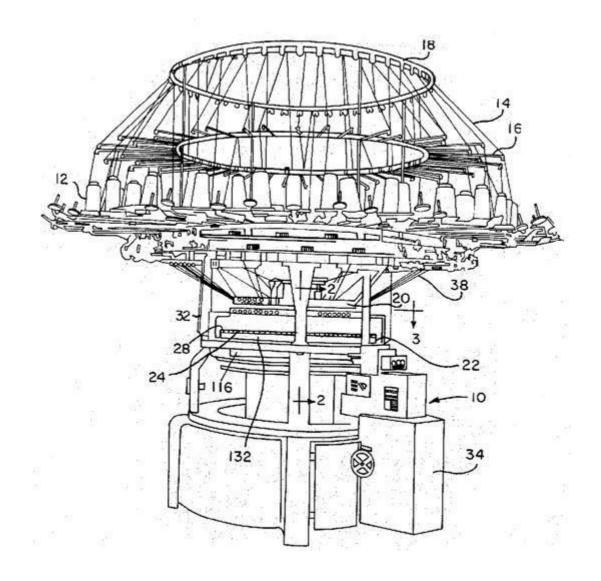
#### D04B 9/00

Circular knitting machines with independently-movable needles (with fixed spring or bearded needles D04B13/00)

#### **Definition statement**

This subclass/group covers:

circular weft knitting machines with sequential stitch formation in a row of stitches. Example:



## References relevant to classification in this group

This subclass/group does not cover:

circular warp knitting machines	D04B 25/02, D04B 25/04

## D04B 9/025

[N: with stitch-length regulation (cam systems for stitch-length regulation D04B15/327)]

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in <u>D04B 1/22</u>.

#### D04B 9/065

# [N: with stitch-length regulation (cam systems for stitch-length regulation D04B15/327)]

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in D04B 1/22.

#### D04B 9/08

## for interlock goods

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern should additionally be classified in D04B 1/102.

#### D04B 9/12

## with provision for incorporating pile threads

## Special rules of classification within this group

Documents also describing knitted pile fabrics should additionally be classified in D04B 1/02.

#### D04B 9/14

# with provision for incorporating loose fibres, e.g. in high-pile fabrics

## Special rules of classification within this group

Documents also describing knitted pile fabrics incorporating loose fibres should additionally be classified in D04B 1/025.

#### D04B 9/16

# with provision for incorporating internal threads in laid-in fabrics

## Special rules of classification within this group

Documents also describing knitted fabrics with laid-in unlooped yarn should additionally be classified in <a href="D04B 1/123">D04B 1/123</a>.

#### D04B 9/18

# with provision for splicing by incorporating reinforcing threads

## Special rules of classification within this group

Documents also describing patterned fabrics characterised by thread material should additionally be classified in D04B 1/12.

#### D04B 9/20

with provision for narrowing or widening; with reciprocatory action, e.g. for knitting of flat portions

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in <u>D04B 1/22</u>.

#### D04B 9/22

with provision for changing the fabric construction, e.g. from plain to rib-loop fabric

## Special rules of classification within this group

Documents also describing fabrics or articles characterised by the stitch pattern should additionally be classified in <a href="D04B 1/102">D04B 1/102</a>.

#### D04B 9/24

with special provision for commencing goods, e.g. with non-run edges

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at a selvedge should additionally be classified in <a href="D04B 1/106">D04B 1/106</a>.

#### D04B 9/26

## for producing patterned fabrics

## Special rules of classification within this group

Documents also describing non-run fabrics or articles should additionally be classified in D04B 1/06.

Documents also describing patterned fabrics characterised by thread material should additionally be classified in <a href="D04B1/12">D04B 1/12</a>.

#### D04B 9/28

## with colour patterns

## Special rules of classification within this group

Documents also describing knitted goods with colour pattern should additionally be classified in <u>D04B 1/126</u>.

#### D04B 9/36

## Intarsia work obtained by reciprocatory action

## Special rules of classification within this group

Documents also describing intarsia knitted goods should additionally be classified in <u>D04B 1/126</u>.

## **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

is a knitting technique used to create patterns with multiple colours. There is only one active colour on any given stitch.

#### D04B 9/38

#### with stitch patterns

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern should additionally be classified in  $\underline{\text{D04B 1/102}}$ .

#### D04B 9/40

with provision for transfer of knitted goods from one machine to another

#### **Definition statement**

This subclass/group covers:

Circular knitting machines with the provision for transfer of knitted goods from one machine to another whereby the other machine may form part of the knitting machine but performs a special function, e.g. toe closing, not performed on the knitting head.

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Circular knitting machines with toe closing at the knitting head, i.e. no transfer from the knitting needles at toe closing	D04B 9/56
Sewing units for assembling parts of knitted panties or closing the stocking toe part	D05B 23/007

#### D04B 9/42

# specially adapted for producing goods of particular configuration

#### **Definition statement**

This subclass/group covers:

knitting machines modified for performing particular knitting processes, e.g. knitting of one-piece panty hose.

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in <a href="D04B 1/22">D04B 1/22</a>.

#### D04B 9/44

elongated tubular articles of small diameter, e.g. coverings for cables (sheathing electric cables H01B13/22)

## Special rules of classification within this group

Documents also describing knitted elongated tubular articles of small diameter should additionally be classified in <a href="D04B 1/225">D04B 1/225</a>.

#### D04B 9/46

## stockings, or portions thereof

## Special rules of classification within this group

Documents also describing knitted socks or stockings should additionally be classified in D04B 1/26.

#### D04B 9/48

## non-run stockings

## Special rules of classification within this group

Documents covering non-run stockings should additionally be classified in D04B 1/26 and D04B 1/06.

#### D04B 9/52

## surgical stockings

## Special rules of classification within this group

Documents also describing surgical stockings should additionally be classified in D04B 1/265.

#### D04B 9/54

#### welts, e.g. double or turned welts

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at a selvedge should additionally be classified in <a href="D04B 1/106">D04B 1/106</a>.

## D04B 9/56

#### heel or toe portions

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at heel or toe portions should additionally be classified in <u>D04B 1/108</u>.

#### D04B 11/00

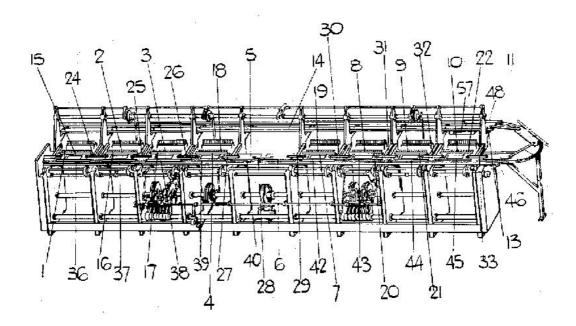
Straight-bar knitting machines with fixed needles (flat-bed

## machines with independently-movable needles D04B7/00)

#### **Definition statement**

This subclass/group covers:

Flat straight bar weft knitting machines with concurrent stitch formation in a row of stitches.



#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Flat warp knitting machines	D04B 23/00

## D04B 11/025

[N: with stitch-length-regulating mechanism]

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in  $\underline{\text{D04B 1/22}}$ .

## D04B 11/06

with provision for narrowing or widening to produce fully-fashioned goods

Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in <u>D04B 1/22</u>.

#### D04B 11/08

## with provision for incorporating pile threads

## Special rules of classification within this group

Documents also describing knitted pile fabrics should additionally be classified in D04B 1/02.

#### D04B 11/10

with provision for incorporating internal threads in laid-in fabrics

## Special rules of classification within this group

Documents also describing knitted fabrics with laid-in unlooped yarn should additionally be classified in <u>D04B 1/123</u>.

#### D04B 11/12

for producing fabrics from, or incorporating, elastic threads

## Special rules of classification within this group

Documents also describing knitted goods consisting of, or incorporating elastic threads should additionally be classified in <a href="D04B 1/18">D04B 1/18</a>.

#### D04B 11/14

with provision for changing the fabric construction, e.g. from plain to rib-loop fabric

## Special rules of classification within this group

Documents also describing fabrics or articles characterised by the stitch pattern should additionally be classified in <a href="D04B 1/102">D04B 1/102</a>.

#### D04B 11/16

with special provision for commencing goods, e.g. with non-run edges

Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at a selvedge should additionally be classified in <a href="D04B 1/106">D04B 1/106</a>.

#### D04B 11/18

## for producing patterned fabrics

## Special rules of classification within this group

Documents also describing non-run fabrics or articles should additionally be classified in D04B 1/06.

Documents also describing patterned fabrics characterised by thread material should additionally be classified in <a href="D04B 1/12">D04B 1/12</a>.

#### D04B 11/20

## with colour patterns

## Special rules of classification within this group

Documents also describing knitted goods with colour pattern should additionally be classified in D04B 1/126.

#### D04B 11/22

#### with stitch patterns

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern should additionally be classified in <a href="D04B 1/102">D04B 1/102</a>.

#### D04B 11/24

# with provision for transfer of knitted goods from one machine to another

#### **Definition statement**

This subclass/group covers:

straight bar knitting machines with the provision for transfer of knitted goods from one machine to another whereby the other machine may form part of the knitting machine but performs a special function, e.g. rib knitting, not performed on the knitting head.

#### D04B 11/26

# specially adapted for producing goods of particular configuration

## Special rules of classification within this group

Documents also describing knitted goods of particular configuration should additionally be classified in <u>D04B 1/22</u>.

#### D04B 11/28

## stockings, or portions thereof

## Special rules of classification within this group

Documents also describing knitted socks or stockings should additionally be classified in D04B 1/26.

#### D04B 11/30

## non-run stockings

## Special rules of classification within this group

Documents covering non-run stockings should additionally be classified in D04B 1/26 and D04B 1/06.

#### D04B 11/32

#### welts, e.g. double or turned welts

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at a selvedge should additionally be classified in <a href="D04B 1/106">D04B 1/106</a>.

#### D04B 11/34

#### heel or toe portions

## Special rules of classification within this group

Documents also describing fabrics or articles with stitch pattern at heel or toe portions should additionally be classified in <a href="D04B">D04B</a> 1/108.

#### D04B 11/36

## other wearing apparel

Documents also describing wearing apparel should additionally be classified in D04B 1/24.

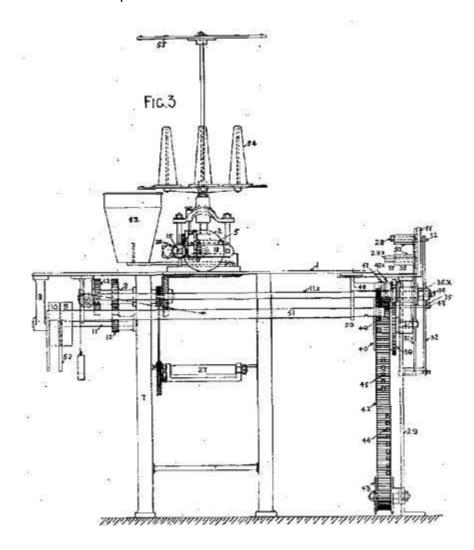
## D04B 13/00

Circular knitting machines with fixed spring or bearded needles, e.g. loop-wheel machines (with independently-movable needles D04B9/00)

#### **Definition statement**

This subclass/group covers:

Circular weft knitting machines with concurrent stitch formation in a row of stitches. Example:



#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Circular warp knitting machines	<u>D04B 25/02</u> , <u>D04B 25/04</u> .

#### D04B 15/00

Details of, or auxiliary devices incorporated in, weft knitting machines, restricted to machines of this kind (details or auxiliary devices not so restricted D04B35/00)

#### **Definition statement**

This subclass/group covers:

All details on devices for weft knitting machines not provided for in one of the sub-groups, e.g. frames or servicing aids.

## References relevant to classification in this group

This subclass/group does not cover:

Details or auxiliary devices	<u>D04B 27/00</u> .
incorporated in warp knitting	
machines	

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Details of, or auxiliary devices incorporated in, knitting machines not limited to a specific type of knitting or not otherwise provided for	D04B 35/00
Needles for knitting devices	<u>D04B 35/04</u> - <u>D04B 35/08</u>
Auxiliary apparatus or devices for use with weft knitting machines, e.g. spare parts containers or computerised design systems	D04B 37/02

# Special rules of classification within this group

In this subclass, multiple classification is allowed, especially in combination with main groups <u>D04B 7/00</u>, <u>D04B 9/00</u>, <u>D04B 11/00</u> and <u>D04B 13/00</u>.

## D04B 15/44

## Tensioning devices for individual threads

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Guides for filamentary material in general	<u>B65H 57/00</u>
Adjusting or controlling tension in filamentary material in general	<u>B65H 59/00</u>

## D04B 15/48

## **Thread-feeding devices**

#### **Definition statement**

This subclass/group covers:

All positive thread feeding devices actively forwarding thread from the storage to a knitting head and thread feeding devices not covered by one of the sub-groups.

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Handling the weft between bulk storage and weft-inserting means (e.g. thread feeding devices for looms)	D03D 47/34
Adjusting or controlling tension in filamentary material by regulating speed of driving mechanism of unwinding, paying-out, forwarding, winding or depositing devices in general	<u>D03D 47/34</u>

# Special rules of classification within this group

Thread-feeding devices designed for purposes other than feeding threads to weft knitting machines are not classified here.

#### D04B 15/482

[N: comprising a rotatable or stationary intermediate storage drum from which the thread is axially and intermittently pulled off; Devices which can be switched between positive feed and intermittent feed]

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Forwarding filamentary material in	B65H 51/00
general	

#### D04B 15/665

## [N: Driving-gear for programme or pattern devices]

#### **Definition statement**

This subclass/group covers:

Driving-gear including electronic control means, e.g. microcomputers for driving the knitting machine.

#### D04B 15/94

## Driving-gear not otherwise provided for

#### **Definition statement**

This subclass/group covers:

Driving-gear including electronic control means, e.g. microcomputers for driving a device associated with a knitting machine.

#### D04B 15/99

#### electrically controlled

#### **Definition statement**

This subclass/group covers:

devices subordinate to a control means of higher hierarchy, e.g. driving gear for individual knitting machines, when subject to remote control by a central plant controller.

## References relevant to classification in this group

This subclass/group does not cover:

Knitwear design systems	D04B 37/00

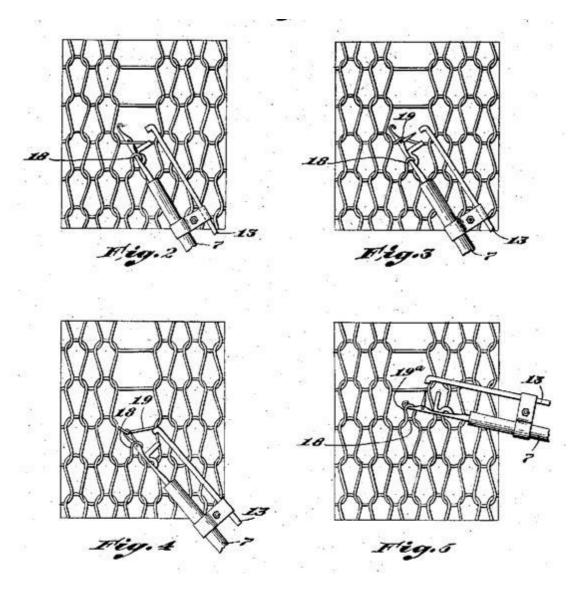
## D04B 17/00

## Repairing knitted fabrics by knitting operations

## **Definition statement**

This subclass/group covers:

Fabric repairing processes and devices for effecting repairs. Example:



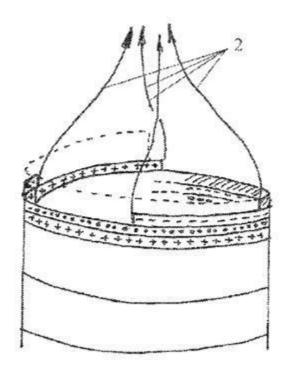
D04B 19/00

## **Unravelling knitted fabrics**

#### **Definition statement**

This subclass/group covers:

Fabric unravelling processes and apparatus for such processes. Example:



# D04B 21/00

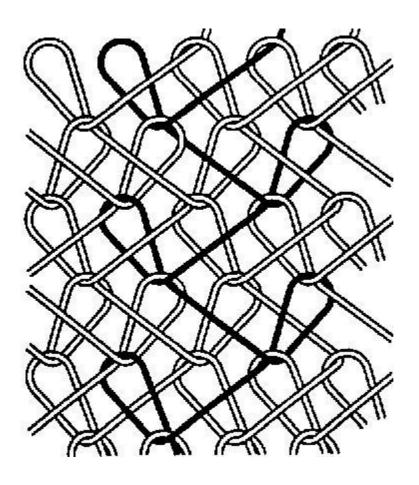
Warp knitting processes for the production of fabrics or articles not dependent on the use of particular machines; Fabrics or articles defined by such processes

#### **Definition statement**

This subclass/group covers:

Warp knitting processes or fabrics with specific details on materials and/or fabric structure

Warp knitted fabrics and warp knitting processes not otherwise provided for. Example:



## References relevant to classification in this group

This subclass/group does not cover:

Weft knitting processes and products	D04B 1/00
Combined weft and warp knitting	D04B 39/04

## Special rules of classification within this group

In this group, multiple classification is allowed. The classification is desirably complemented by a classification in the indexing scheme relating to textiles, i.e. <a href="D10B 2101/00">D10B 2509/08</a> for identifying the thread composition, fabric structure and application field. Warp knitted fabrics or articles of unspecified construction or composition are not classified here.

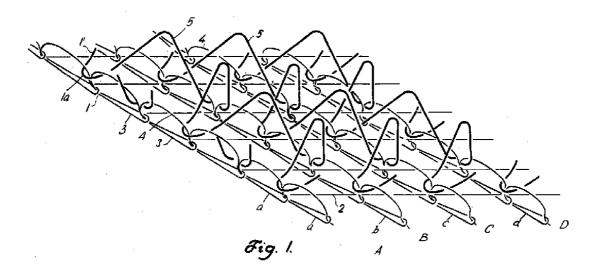
#### D04B 21/02

## Pile fabrics or articles having similar surface features

#### **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group.



## References relevant to classification in this group

This subclass/group does not cover:

Pile fabrics without pile forming material, e.g. fleece, and loft obtained by finishing treatments like napping	D04B 35/36
Pile fabrics subjected to napping treatment	D06C 11/00
Pile fabrics with piles applied to a preformed ground fabric (e.g. by tufting)	D05C

## **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Flocked products, i.e. products wherein the projecting fibres are not routed in a stitch thread	B05C 19/001
Woven pile fabrics	D03D 27/00

# Special rules of classification within this group

The classification is desirably complemented by a classification with the Indexing Code <u>D10B 2403/01</u> for identifying surface features.

Pile fabrics without pile forming material , e.g. fleece, and loft obtained by finishing treatments like napping is complemented in combination with the appropriate <a href="D04B">D04B</a> (sub)groupwith the Indexing Code <a href="D10B 2403/0111">D10B 2403/0121</a>

Documents also describing machines for warp knitting pile fabrics should additionally be classified in <u>D04B 23/08</u> or <u>D04B 25/08</u>.

## **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Pile fabrics	are fabrics having a significant portion of fibres or yarns, different from ground fabric fibres or yarns, projecting from and oriented transverse to one or both ground fabric faces.

## Synonyms and Keywords

In patent documents the following expressions/words "terry", "plush", "velour", "cut pile" and "velvet" are often used as synonyms.

#### D04B 21/04

## characterised by thread material

#### **Definition statement**

This subclass/group covers:

pile fabrics or articles whereby the properties of the pile thread material alone, or in combination with the pile arrangement, ensure special effects, e.g. enhanced cushioning or thermal shielding.

## Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> - <u>D10B 2331/301</u> for identifying the thread composition.

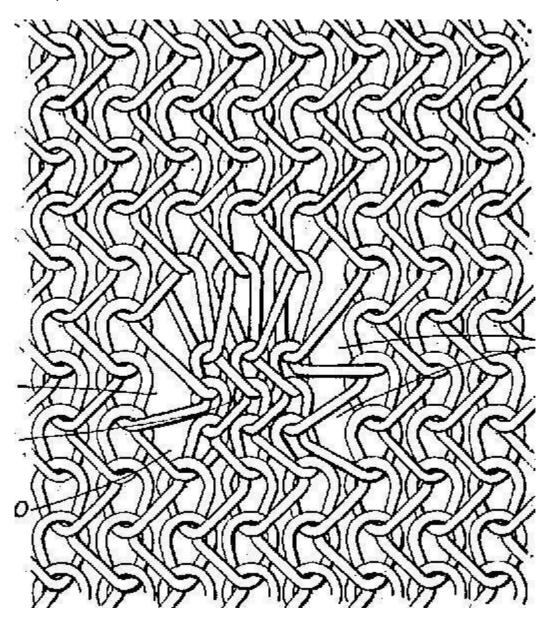
## D04B 21/06

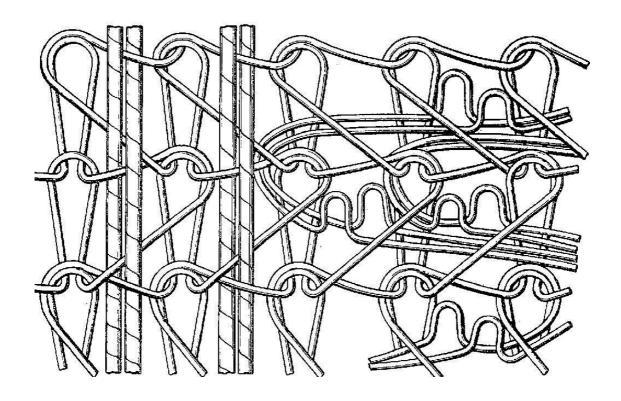
# Patterned fabrics or articles (open-work fabrics D04B21/10)

## **Definition statement**

This subclass/group covers:

Fabrics or articles wherein the non-uniform arrangement of stitches and/or different threads, alone or in combination, ensures the intended effects. Examples:





Documents also describing machines for warp knitting patterned fabrics should additionally be classified in <u>D04B 23/22</u>, <u>D04B 23/24</u> or <u>D04B 25/10</u>.

Documents also describing thread guide bars with independently movable thread guides should additionally be classified in <a href="D04B 27/32">D04B 27/32</a>.

## **Synonyms and Keywords**

In patent documents the following expressions/words "jacquard fabric" and "patterned fabric"are often used as synonyms.

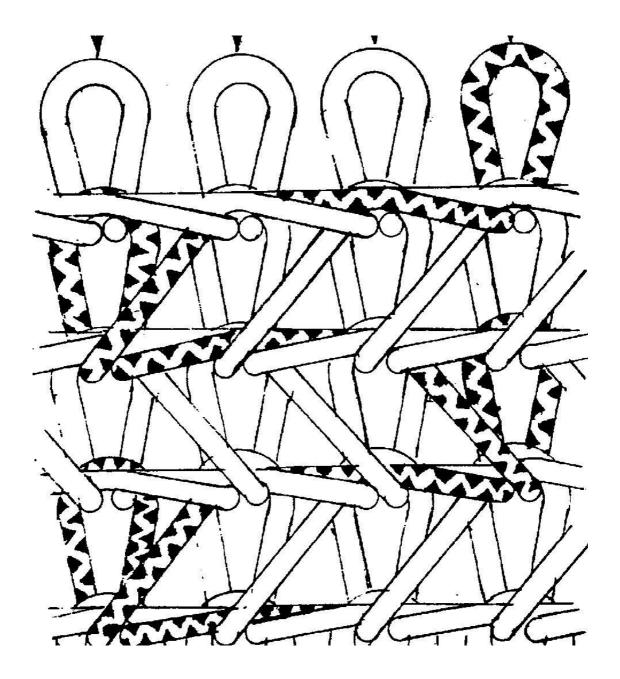
#### D04B 21/08

## characterised by thread material

#### **Definition statement**

This subclass/group covers:

Fabrics or articles whereby the properties of a thread material in combination with the stitch pattern ensure intended effects. Example:



# Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme  $\underline{\text{D10B 2101/00}}$  -  $\underline{\text{D10B 2331/301}}$  for identifying the thread composition.

# **Synonyms and Keywords**

In patent documents the following expressions/words "jacquard fabric" and "embroidered fabric" are often used as synonyms.

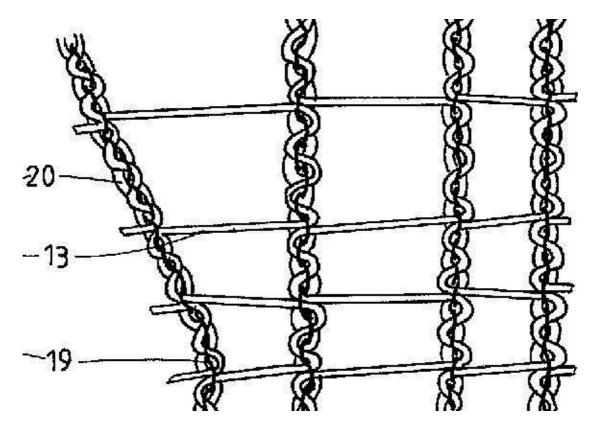
# D04B 21/10

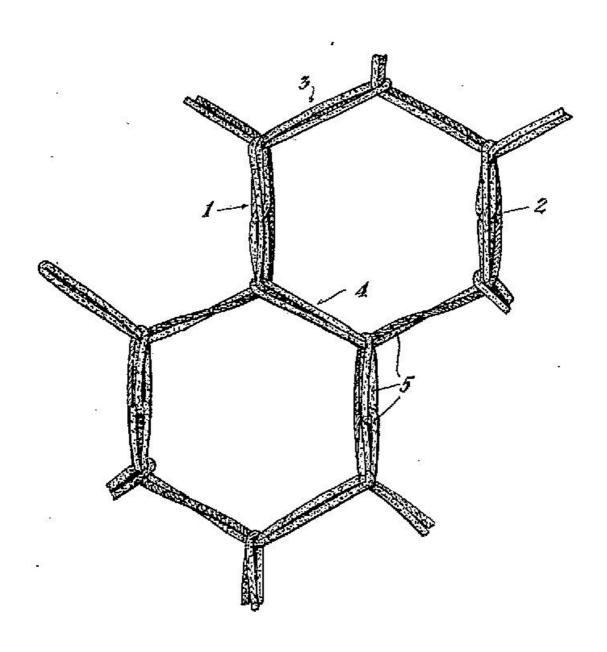
# **Open-work fabrics**

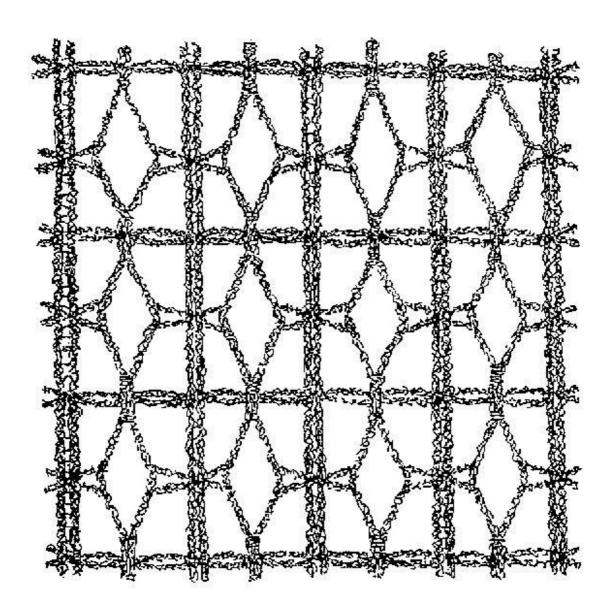
# **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.







### Informative references

Attention is drawn to the following places, which may be of interest for search:

Braided tulle fabrics	D04C 1/08
Making nets by knotting	<u>D04G 1/00</u>

# **Synonyms and Keywords**

In patent documents the following expressions/words "tulle", "mesh", "net" and "netting"are often used as synonyms.

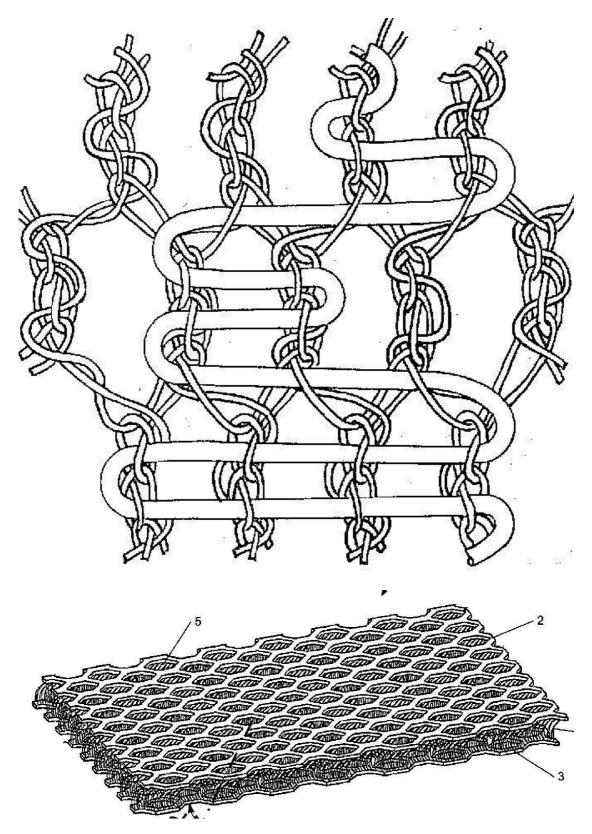
# D04B 21/12

characterised by thread material

### **Definition statement**

This subclass/group covers:

Fabrics or articles whereby the properties of a thread material in combination with the stitch pattern ensure intended effects. Example:



The example above shows a double ply mesh including thread material (3) having a spacer effect separating both face layers (2).

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Patterned braided lace or tulle	<u>D04C 1/10</u> .

### Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> - <u>D10B 2331/301</u> for identifying the thread composition.

### Synonyms and Keywords

In patent documents the following expressions/words "lace" and "embroidery" are often used as synonyms.

#### D04B 21/14

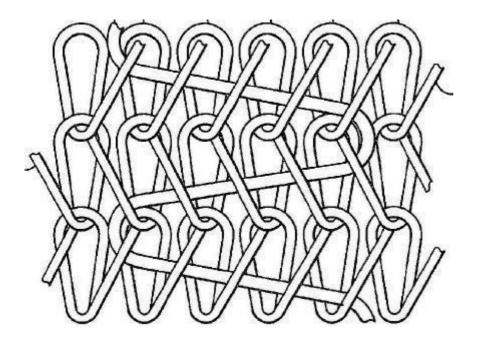
Fabrics characterised by the incorporation by knitting, in one or more thread, fleece, or fabric layers, of reinforcing, binding, or decorative threads; Fabrics incorporating small auxiliary elements, e.g. for decorative purposes (pile fabrics D04B21/02; non-woven fabrics in general D04H)

### **Definition statement**

This subclass/group covers:

Fabrics comprising components providing special properties, e.g. metal yarns or stiffening wires, not provided for in groups <u>D04B 21/145</u> - <u>D04B 21/18</u>

fabrics coated with a film or incorporating additional compounds, e.g. fillings. Example:



# References relevant to classification in this group

This subclass/group does not cover:

Pile fabrics	D04B 21/02;
Woven fabrics in general	<u>D04H</u>

## Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2101/00</u> for identifying the thread composition and/or <u>D10B 2403/02</u> for identifying the cross-sectional features.

Documents also describing machines for incorporating small auxiliary elements should additionally be classified in <a href="D04B-23/14">D04B-23/14</a>.

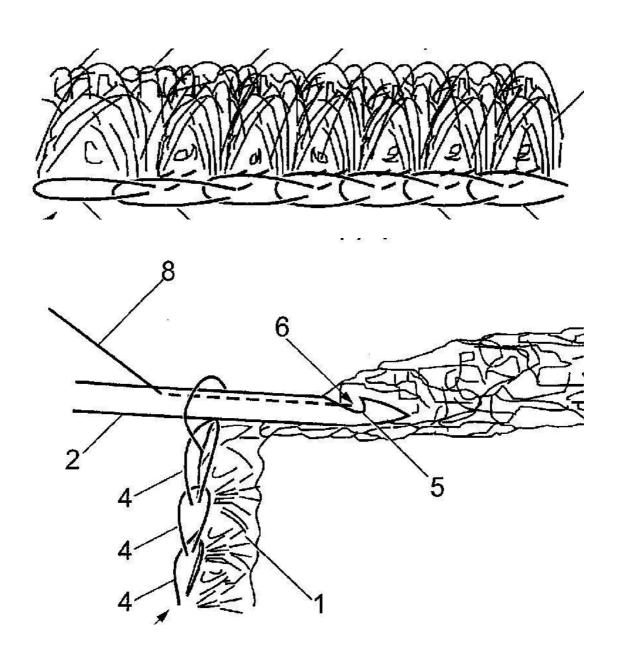
### D04B 21/145

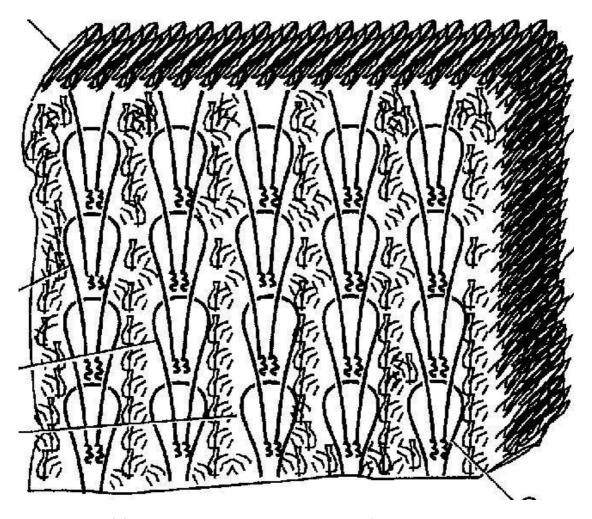
# [N: with stitches drawn from loose fibres, e.g. web-knitted fabrics]

#### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.





The stitches (4) shown in the above example are formed by piercing a web and drawing loops from the fibres caught in the needle head (5).

# Special rules of classification within this group

Documents also describing machines for knitting through thread, fleece or fabric layers should additionally be classified in <a href="D04B 23/10">D04B 23/10</a>.

# Synonyms and Keywords

In patent documents the following expressions/words "Malivlies", "Voltex" and "Kunit" are often used as synonyms.

### D04B 21/16

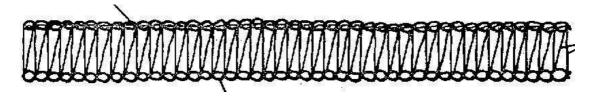
## incorporating synthetic threads

### **Definition statement**

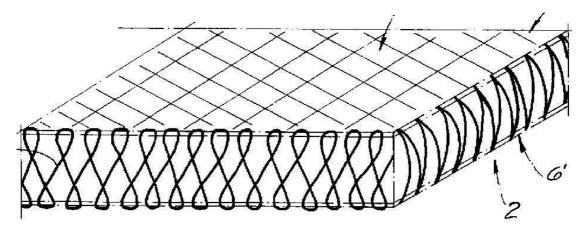
This subclass/group covers:

fabrics or articles wherein the properties of a thread material (e.g. wicking, optical, chemical, biocompatible, biostatic, etc ) in combination with the thread

arrangement (e.g. inner, intermediate or outer layer) ensure intended effects, e.g. cover, hand or resilience. Examples:



The thread material in the intermediate layer in the example above has a spacer effect.



The thread material (6) in the intermediate layer in the example above can provide moisture transport.

# References relevant to classification in this group

This subclass/group does not cover:

Warp knitting processes and fabrics incorporating elastic threads	D04B 21/18
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# Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme <u>D10B 2201/20</u>, <u>D10B 2211/20</u>, <u>D10B 2321/00</u> or <u>D10B 2331/00</u> for identifying the thread composition and/or <u>D10B 2403/00</u> for identifying details of fabric structure established in the fabric forming process.

# **Glossary of terms**

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Synthetic threads	are yarns made from or
	predominantly comprising artificial

organic fibres or filaments.

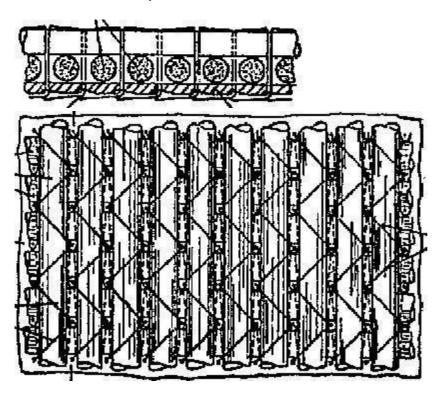
### D04B 21/165

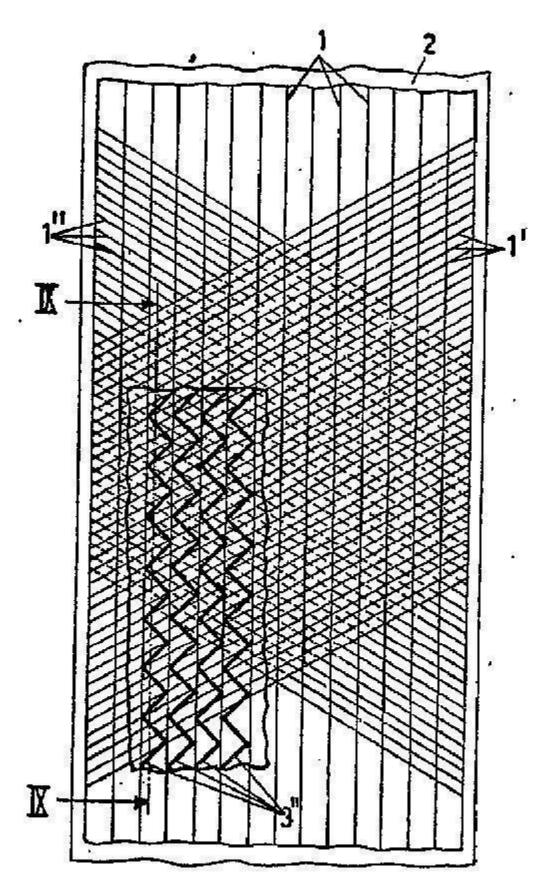
[N: with yarns stitched through one or more layers or tows, e.g. stitch-bonded fabrics (layered products not united by stitch loops B32B5/22)]

### **Definition statement**

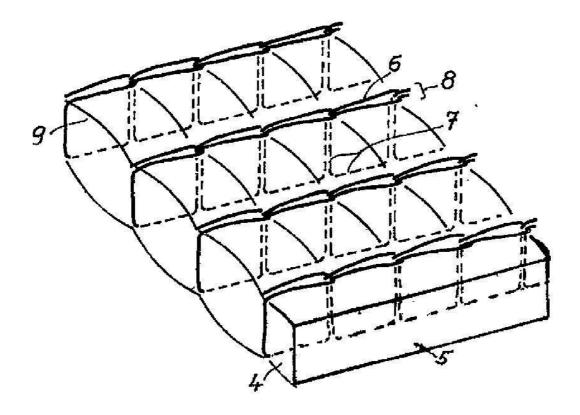
This subclass/group covers:

Fabrics with synthetic threads as stitching threads combining all components of the fabric. Examples:





The example above shows a voluminous web consolidated by stitching interlinked threads through the web (see also example below).



# **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Layered products with one or more fibrous layers needled to another layer	B32B 5/06
Layered products characterised by the presence of two or more layers which comprise fibres, filaments, granules, or powder, or are foamed or specifically porous	B32B 5/22
Layered products characterised by the connection of layers by mechanical connection	B32B 7/08
Warp knitted fabrics with mutually interlaced warp and weft inlay threads	D04B 39/06
Non-woven fabrics formed wholly or mainly of yarns or like filamentary material of substantial length in rectilinear paths (e.g. unstitched yarn lay-ups)	<u>D04H 3/04</u>

### Special rules of classification within this group

Documents describing also machines for incorporating unlooped wefts extending from selvedge to selvedge should additionally be classified in <a href="D04B">D04B</a> 23/12.

### **Synonyms and Keywords**

In patent documents the following expressions/words "Maliwatt", "Arachne", and "stitch-bonded" are often used as synonyms.

### D04B 21/18

### incorporating elastic threads

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Warp knitting processes specially	<u>D04B 21/207</u> .
adapted for wearing apparel or	
garment blanks	

## Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme  $\underline{\text{D10B }2101/00}$  -  $\underline{\text{D10B }2331/301}$  for identifying the thread composition.

Documents also describing flat warp knitting machines for producing fabrics consisting of, or incorporating elastic threads should additionally be classified in D04B 23/06.

## Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

are threads which fully recover to the initial length from extension by 100
per cent or more

#### D04B 21/20

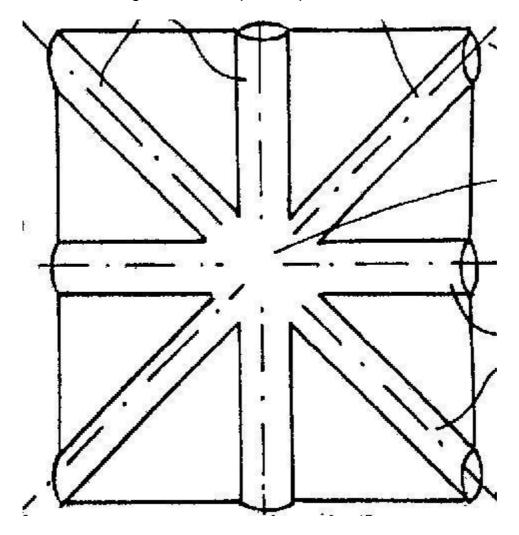
specially adapted for knitting articles of particular

# configuration

### **Definition statement**

This subclass/group covers:

Articles requiring adaptation of the standard knitting process and/or the standard knitting machine setup. Example:



# Special rules of classification within this group

The classification is desirably complemented with the Indexing Code <a href="D10B">D10B</a>
<a href="2403/02">2403/02</a> identifying cross-sectional features and/or <a href="D10B 2403/03">D10B 2403/03</a> identifying shape features.

Documents also describing machines for warp knitting articles of particular configuration should additionally be classified in D04B 23/16 or D04B 25/14.

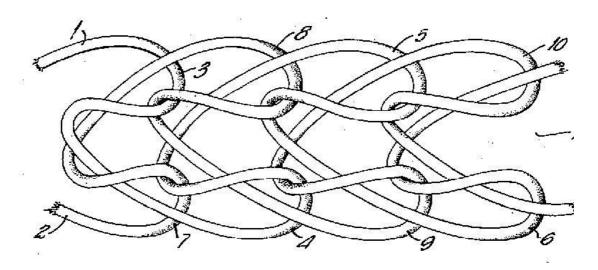
### D04B 21/202

[N: warp knitted yarns]

#### **Definition statement**

This subclass/group covers:

Flexible elongate structures composed of one or more threads interlaced by warp knit stitches, suitable for being further processed into fabrics on textile machines. Example:



# References relevant to classification in this group

This subclass/group does not cover:

Such as warp knit tapes or belts, which remain in	<u>D04B 21/20</u> .
Narrow fabrics of constant width	<u>D10B 2403/031</u>

# Special rules of classification within this group

The classification in this group is desirably complemented by a classification in the indexing scheme  $\underline{\text{D10B }2101/00}$  -  $\underline{\text{D10B }2331/301}$  for identifying the thread composition.

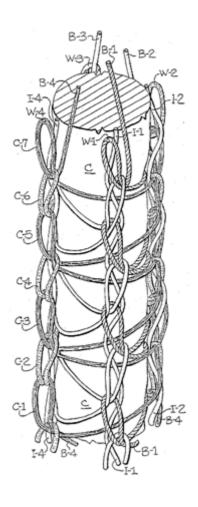
### D04B 21/205

[N: Elongated tubular articles of small diameter, e.g. coverings or reinforcements for cables or hoses]

#### **Definition statement**

This subclass/group covers:

Illustrative example of subject matter classified in this group.



### **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Weft knitted elongated tubular articles of small diameter	D04B 1/225
Elongated tubular articles of small diameter knitted by miscellaneous knitting processes	D04B 39/00

# Special rules of classification within this group

Documents also describing machines for knitting around elongated core material should additionally be classified in  $\underline{\text{D04B 23/10}}$ ,  $\underline{\text{D04B 25/02}}$  or  $\underline{\text{D04B 25/04}}$ .

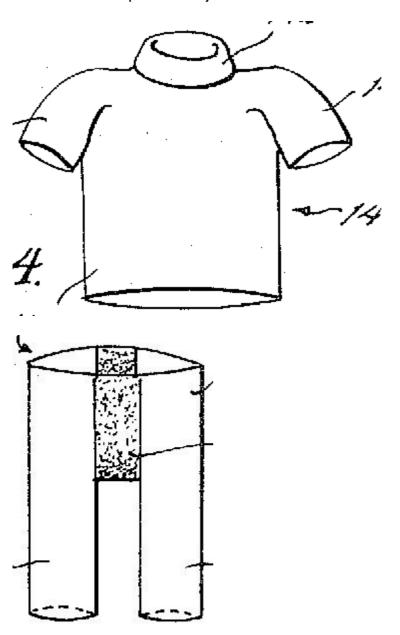
# D04B 21/207

[N: Wearing apparel or garment blanks]

#### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.



# Special rules of classification within this group

The classification is desirably complemented with the Indexing Code <a href="D10B">D10B</a>
<a href="2501/00">2501/00</a> identifying the type of wearing apparel and/or <a href="D10B 2403/033">D10B 2403/033</a>
identifying three dimensional fabric.

Documents also describing flat warp knitting machines with provision for narrowing or widening should additionally be classified in <u>D04B 23/18</u>.

Documents also describing flat warp knitting machines for producing stocking blanks should additionally be classified in <u>D04B 23/20</u>.

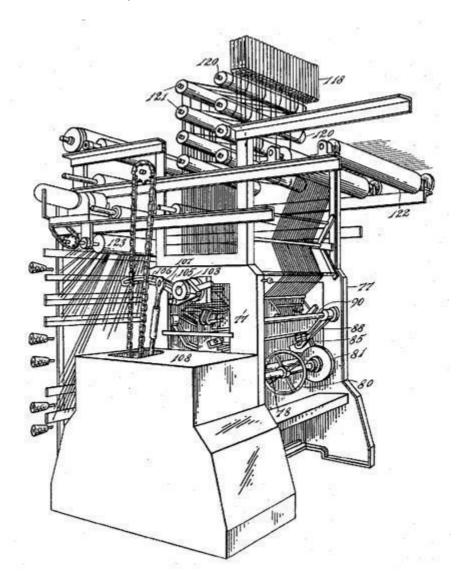
### D04B 23/00

# Flat warp knitting machines

### **Definition statement**

This subclass/group covers:

Flat warp knitting machines with one or two needle bars, e.g. tricot or raschel machines. Example:



### D04B 25/00

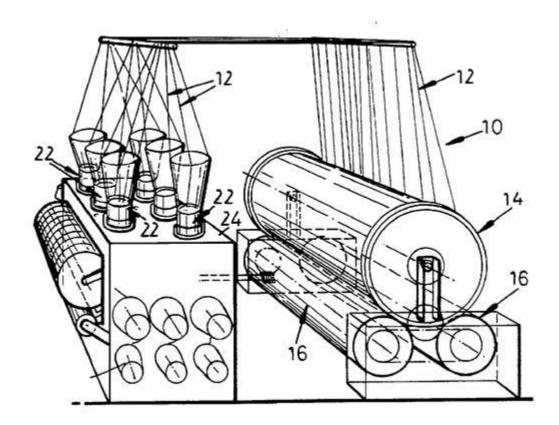
# Warp knitting machines not otherwise provided for

### **Definition statement**

This subclass/group covers:

Warp knitting machines specially adapted for knitting articles of particular

structure or configuration, e.g. meat casings, ornamental articles etc. Example:



### D04B 27/00

Details of, or auxiliary devices incorporated in, warp knitting machines, restricted to machines of this kind (details or auxiliary devices not so restricted D04B35/00)

#### **Definition statement**

This subclass/group covers:

all details on devices for warp knitting machines not provided for in one of the sub-groups, e.g. frames or servicing aids.

### Informative references

Attention is drawn to the following places, which may be of interest for search:

Details of, or auxiliary devices incorporated in, knitting machines not limited to a specific type of knitting or not otherwise provided for	D04B 35/00
Details of, or auxiliary devices incorporated in, weft knitting	D04B 15/00

92

machines	
Needles for knitting devices	<u>D04B 35/04</u> - <u>D04B 35/08</u>
Auxiliary apparatus or devices for use with warp knitting machines, e.g. spare parts containers or computerised design systems	<u>D04B 37/06</u>

### Special rules of classification within this group

In this subclass, multiple classification is allowed, especially in combination with main groups  $\underline{\text{D04B 23/00}}$  or  $\underline{\text{D04B 25/00}}$ .

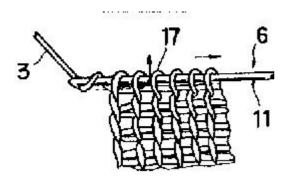
# D04B 31/00

# Crocheting processes for the production of fabrics or articles

#### **Definition statement**

This subclass/group covers:

Crocheting methods using crocheting needles for drawing stitches. Example:



### D04B 33/00

# **Crocheting tools or apparatus**

#### **Definition statement**

This subclass/group covers:

Devices for effecting crocheting methods. Example:



### References relevant to classification in this group

This subclass/group does not cover:

Galloon crocheting machines	D04B 25/06

### D04B 35/00

# Details of, or auxiliary devices incorporated in, knitting machines, not otherwise provided for

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Auxiliary apparatus or devices for use	D04B 37/00
with knitting machines	

### Special rules of classification within this group

In this group, multiple classification is allowed, especially in combination with groups <u>D04B 7/00</u>, <u>D04B 9/00</u>, <u>D04B 11/00</u>, <u>D04B 13/00</u>, <u>D04B 23/00</u> or <u>D04B 25/00</u>. Devices not applied to or not used in conjunction with knitting machines are not classified here.

### D04B 35/02

Knitting tools or instruments not provided for in group D04B15/00 or D04B27/00 (needle manufacture B21G1/00)

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Needles used for hand knitting	<u>D04B 3/02</u>
Needles used for mending knit fabric	<u>D04B 17/04</u>

### D04B 35/10

Indicating, warning, or safety devices, e.g. stop motions

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Warning or safety devices, e.g.	B65H 63/00
automatic fault detectors,	
stop-motions in general	

### D04B 35/24

### by moistening or lubricating

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Moistening, sizing, oiling, waxing, colouring or drying filamentary material as additional measures during package formation	B65H 71/00
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### D04B 35/32

## **Devices for removing lint or fluff**

#### Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements for confining or	<u>B65H 54/702</u> .
removing dust in winding, coiling or	
depositing filamentary material	

### D04B 37/00

Auxiliary apparatus or devices for use with knitting machines (Jacquard cards, pattern chains, apparatus for punching same D03C)

#### **Definition statement**

This subclass/group covers:

Ancillaries for use with but separate from knitting machines, e.g. design systems or knitting tool containers.

## References relevant to classification in this group

This subclass/group does not cover:

Devices exclusively incorporated in weft knitting machines	<u>D04B 15/00</u>
Devices exclusively incorporated in warp knitting machines	<u>D04B 27/00</u>
Details of, or auxiliary devices incorporated in, knitting machines not limited to specific types of knitting machines or not otherwise provided for	D04B 35/00

# Special rules of classification within this group

In this group, multiple classification is allowed, especially in combination with groups <u>D04B 7/00</u>, <u>D04B 9/00</u>, <u>D04B 11/00</u>, <u>D04B 13/00</u>, <u>D04B 23/00</u> or <u>D04B 25/00</u>.

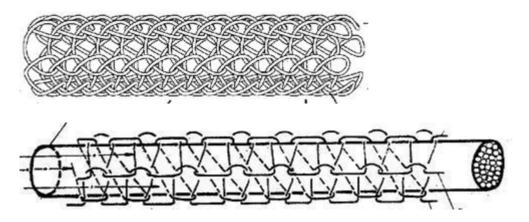
### D04B 39/00

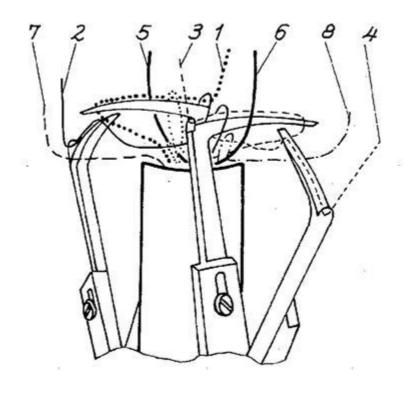
# Miscellaneous knitting processes, apparatus, or machines, not otherwise provided for

#### **Definition statement**

This subclass/group covers:

Knitted articles, knitting processes and apparatus for making such articles not or not fully covered by weft or warp knitting technology, e.g. Kemafil articles or needleless knitting machines. Examples:





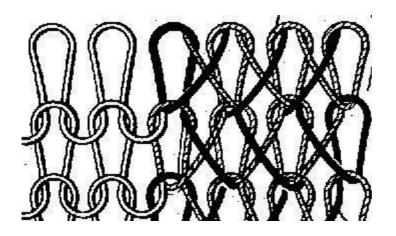
# D04B 39/04

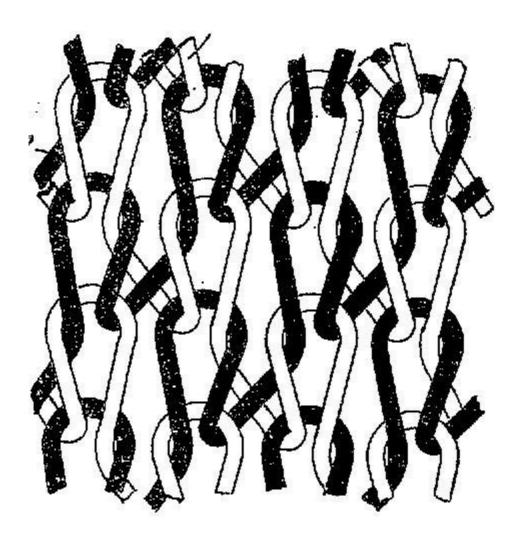
# adapted for combined weft and warp knitting

### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.





# **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Circular knitting machines for wrap striping	D04B 9/32
Warp knitting machines with independently-movable knitting needles	D04B 23/04
Milanese machines	D04B 25/04

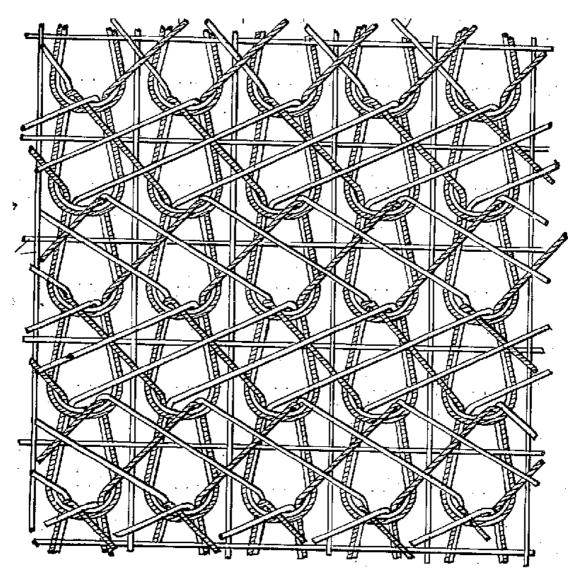
# D04B 39/06

# adapted for combined knitting and weaving

### **Definition statement**

This subclass/group covers:

Illustrative examples of subject matter classified in this group.



# **Informative references**

Attention is drawn to the following places, which may be of interest for search:

Warp knitting machines for knitting through fabric layers.	D04B 23/10